

HONOURABLE MENTION:

INTERNATIONAL FOOD EXHIBITION, AGRICULTURAL HALL, LONDON, OCTOBER, 1880.

GOLD MEDAL, SOCIETY OF ARTS, PARIS, 1884.

TO AERATED WATER MANUFACTURERS.

Ginger Ale, Ginger Beer, and Lemonade, made from the following Essences, are unrivalled for their exquisitely fine flavour, and richness of aroma.

HAY'S SOLUBLE + ESSENCES.

ARE GUARANTEED TO BE THE FINEST IN THE MARKET.

HAY'S SOLUBLE ESSENCE OF JAMAICA GINGER.

A Pure Essence of the Finest Ginger, perfectly free from Capsicum. Highly adapted for the manufacture of Transparent Aerated Waters, and for all Dietetic, Medicinal, and Pharmaceutical purposes. Trade Price, 5s. per lb.; 12 lbs. and upwards, 4s. 6d. per lb. Extra Fine and Strong, 5s. 6d. per lb.; 12 lbs. and upwards, 5s.

HAY'S COMPOUND FORTIFIED ESSENCE OF JAMAICA GINGER. FOR FIRST QUALITY GINGER ALE.

Specially prepared for the manufacture of the very Finest Ginger Ale made, is an addition of Vanilla, Lemon, and other flavours to the above. It imparts, with the exquisite Ginger Aroma of the above-mentioned Essence, a peculiarly fine fruity flavour, combined with the fullest amount of fragrance and pungency. Trade Price, 5s. 6d. per lb.; 12 lbs. and upwards, 5s. Extra Fine and Strong, 6s. per lb.; 12 lbs. and upwards, 5s. 6d. Quantity required, five fluid ozs. to each gallon of Syrup, making 106 10-oz. Bottles.

HAY'S GINGER ALE EXTRACT. FOR SECOND QUALITY GINGER ALE.

This Extract is strongly recommended for the manufacture of Ginger Ale, to which it imparts Pungency, Colouring, great Brilliancy, and an unusually Fine Ginger Flavour and Aroma, and makes a thoroughly good article. Trade Price, 4s. 6d. per lb.; 12 lbs. and upwards, 4s. Quantity required, three fluid ozs. to each gallon of Syrup, making 106 10-oz. Bottles.

HAY'S GINGER ALE ESSENCE. Highly Concentrated. FOR THIRD QUALITY GINGER ALE.

This Essence, which is a complete Bouquet of Flavours in a highly concentrated state, makes a Ginger Ale possessing an amount of aroma, flavour, and quality that will be sure to command a large sale, and that is unsurpassed by the so-called finest Belfast Ginger Ale. Trade Price, 9s. per lb.; 12 lbs. and upwards, 8s. 6d. Quantity required, half a fluid oz. to each gallon of Syrup, making 106 10-oz. Bottles. This Essence will be found most valuable to the general trade.

HAY'S SOLUBLE ESSENCE OF MESSINA LEMONS.

A magnificent Preparation, perfectly soluble, and makes the finest Lemonade obtainable. Trade Price, 8s. 6d. per lb.; 12 lbs. and upwards, 8s. "Added in the proportion of one fluid oz. to each gallon of Syrup, the Soluble Essence imparts the most delicious flavour of the Lemon."—*The Chemist's Journal*.

HAY'S GINGER CHAMPAGNE ESSENCE.

For the manufacture of Ginger Champagne. This Essence is a combination of the finest flavours, and imparts with the Ginger a most exquisite aroma, making a most delicious and refreshing approximation to Champagne. Trade Price, 8s. per lb.; 12 lbs. and upwards, 7s. 6d. per lb. Quantity required, ten fluid ozs. to each gallon of Syrup, making 106 10-oz. Bottles.

HAY'S TONIC ALE ESSENCE.

Tonic Ale made from this Essence is strongly recommended as a most agreeable, non-intoxicating, and appetising beverage, in the place of Bitter Beer. Price, 6s. 6d. per lb.; 12 lbs. and upwards, 6s. Quantity required, 5 fluid ozs. to each gallon of Syrup making 106 10-oz. bottles.

NOTE.—The above are specially recommended to manufacturers requiring the very finest Essences obtainable. There is nothing in the market to equal them.

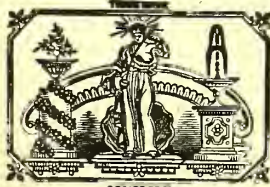
A FEW OF THE MANY REPORTS OF THE LEADING HIGHEST MEDICAL AND OTHER JOURNALS ON MY PREPARATIONS ARE HERE QUOTED:—

SOLUBLE ESSENCE OF GINGER.—"It should entirely supersede the official preparation of the British Pharmacopoeia."—*Medical Press*. "This Essence is of a very delicate and beautiful appearance, the aroma is fine and powerful, and its strength is very great indeed. The flavour is really exquisite, and it concentrates in quite an extraordinary degree the very best aromatic qualities of ginger."—*Drinks*, London, Sept. 1, 1884.

GINGER CHAMPAGNE MADE FROM HAY'S ESSENCE.—"An excellent and most agreeable beverage."—*The Lancet*. "One of the most delicate and wholesome drinks in the market."—*Medical Press*. "The fine Aroma of Ginger which Mr. Hay has caught with remarkable success is an excellent substitute for Alcohol, as it gives what old port wine drinkers used to call 'body,' and to many people besides professed teetotallers, an occasional change at least from the Royal French Beverage to its less costly, but equally sparkling and more refreshing, English rival is a welcome treat."—*The Chemist and Druggist*.

GINGER ALE MADE FROM HAY'S FORTIFIED ESSENCE.—"It pours out with as fine a 'head' as any glass of ale, and possesses all the fine aromatic flavour of the pure ginger. It is a beverage which is sure to win favour wherever introduced."—*The Chemist and Druggist*.

The difference between preparations made from the above Essences and those made from the numerous spurious imitations of the above, bearing the name of Soluble Essences, is most marked, and no manufacturer using the latter can compete with one using Hay's Preparations, as is universally known. *The greatest care is used in packing for Export.*



W. HAY, MANUFACTURING CHEMIST, ENGLAND

BEVERLEY ROAD, HULL,

Indentors, to prevent disappointment, should specify that the goods are to be of Hay's Manufacture.

W. HAY CAUTIONS THE TRADE against the use of those spurious so-called SOLUBLE ESSENCES which, besides having NO GINGER AROMA, are FLAVOURLESS, RANK, and DISAGREEABLE, and are little more than TINCTURES OF CAPSICUM.

CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO. 32 LUDGATE HILL, E.C.,

CHEMISTS' TRANSFER AGENTS.

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION. Immediate attention given to Foreign Commissions. The Business conducted by Messrs. ORRIDGE & Co. has been known as a Transfer Agency since the year 1846, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on Value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential parties to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain. Particulars of any of the following will be sent free on application:—

1. LONDON, S.W. (Kensington District).—Retail and Dispensing; returns at present £400; capable of great increase; price about £350.
2. LONDON, W.—Main road; good-class Business; returns £518 yearly, with good profits; large and convenient house; price £500.
3. LONDON, CITY.—An old-established City Business for disposal; returns £1 600; profits good; price to be arranged.
- LONDON, S.W.—Good class Retail and Dispensing; returns £700, full prices; price about £700.
5. SURREY.—Good town; Retail and Dispensing; returns nearly £600 yearly; good house, attractive garden; price £600.
6. NORFOLK.—Old Established Business of good class; returns average £700; profits good; valuation only required.
7. KENT.—Unopposed Country Business; returns nearly £350, with good profits; good house, attractive garden; price £250.
8. SOUTH COAST.—Good town; small select Business; returns nearly £450; capable of great extension; price about £400.

N.B.—No CHARGE TO PURCHASERS. Other Businesses, Town and Country; particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free. Terms for Valuation on application. **ORRIDGE & CO.**

BUSINESSES FOR DISPOSAL.

REVISED SCALE OF CHARGES.

Announcements appearing under this heading are charged as follows:—

Five Lines (Fifty Words) and under 3/6. Cash must be sent with order.

Advertisements for insertion in any issue must reach the Office (42 Cannon Street, London, E.C.) not later than the **THURSDAY** morning in each week. Remittances payable to Edward Halse, crossed **MARTIN & CO.**

CHEMIST, Stationer, and Printer.—An old-established and thoroughly genuine Business must be disposed of immediately, through death; two plate-glass windows in shop, and good private house at the side, rooms large, rent £30; returns over £700, full prices. For further particulars apply to Mr. Deeping, Gresham House, Gopsall Road, Leicester.

MESSRS. BERDOE & CO. have for Transfer—

MIDLANDS.—First-class Dispensing and Retail Business—making £1,000 net profit; price £3,600. Worcester, shire.—Retail Prescribing and Agricultural Trade; returns £1,800, under manager; price £750, less than valuation, West of England.—Good-class trade; returns £750; rent £35. on lease; price £350; only wants seeing. Berdoc & Co., 30 Jewry, City.

Notice.—The Sale by Auction at Leytonstone is postponed until further notice.

SOUTH OF LONDON.—A thoroughly genuine Ready-money Business, doing between £900 and £1,000 a year; good profits; low rent; price, to an immediate purchaser, £750, or offer. "Pharmacist," care of Messrs. Meggeson & Co., 15 Miles Lane, E.C.

MR. G. B. CROCKER has for transfer—

LONDON, N.W.—Through death of the proprietor, a good ready-money Retail and Prescribing, doing under bad management £550; price £550. West of England.—Mixed Country Trade; returns about £1,000; price £450; a suitable man could greatly increase it. Midlands.—Dispensing, Prescribing, and Dentistry; returns £1,000; price £500; moderate rental. Seaside.—Returns £750; price £650. Apply, 15 Walbrook, E.C.

EMPLOYERS WANTING ASSISTANTS.

REVISED SCALE OF CHARGES.

Announcements appearing under this heading on and after March 6 will be charged as follows:—

Five Lines (Fifty Words) and under 3/6. Cash must be sent with order.

From March 6 "The Chemist and Druggist" will be issued weekly, and advertisements for insertion in any issue must reach the Office (42 Cannon Street, London, E.C.) not later than the **THURSDAY** morning in each week. Remittances payable to Edward Halse, crossed **MARTIN & CO.**

OUTDOOR ASSISTANT wanted, for sharp, active Drug trade; one used to stores preferred. Particulars to Cook, Chemist, Nottingham.

WANTED, a Chemist having a knowledge of the Manufacture of Alkaloids and Fine Chemicals. Apply, by letter only, to J. T., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, a competent Man to undertake the duties of the Wet Department of a Wholesale Drug Warehouse, and able to make preparations. References, with application, stating salary, to Crooke & Taylor, Steelhouse Lane, Birmingham.

TRAVELLER wanted, on Commission, to call on chemists, grocers, mineral-water manufacturers, and confectioners; town and country. Lorimer & Co., 42, 44, Hargrave Park Road, London, N.

WANTED, an efficient young Clerk, accustomed to the Wholesale Drug Trade. Apply, by letter only, stating experience, age, salary, &c., addressed "Clericus," Allen & Hanburys, Plough Court, Lombard Street, E.C.

STORE TRADE.—For about April 12th (outdoor); a Junior Assistant, about 22, for sale counter, desiring a permanency; must be active, industrious, rapid in serving, and well recommended by last employer. Apply, stating age, height, salary, experience, and enclose carte, Wand's Drug Store, Haymarket, Leicester.

COMPETENT ASSISTANT to manage Cash Business in main thoroughfare, W.; one with knowledge of Dentistry preferred; salary and commission; good references indispensable. Also Junior who requires half his time for study, and wishes an engagement for the remainder. E. L., 1 Victoria Buildings, Beckenham, Kent.

ASSISTANTS WANTING SITUATIONS.

Announcements appearing under this heading are charged

12 WORDS FOR 1s.;

every additional 3, 4, or 6 words 6d.

Advertisements for insertion in any issue must reach the Office (42 Cannon Street, London, E.C.) not later than the **THURSDAY** morning in each week. Remittances payable to Edward Halse, crossed **MARTIN & CO.**

A JUNIOR; can prescribe and do Mechanical and Surgical Dentistry; 7 years' experience; aged 21. R. A. Bellamy, Bedale.

WANTED, Dispensership or Chemists' Assistancy; knowledge of Dentistry. G. Maddock, Audley, Blackburn.

A TEMPORARY ASSISTANT, or to Manage Branch, or Dispenser to Surgeon. A. L., 37 Crayford Road, Holloway, N.

A ASSISTANT, or to Manage Branch; good Dispenser, Prescriber, and Tooth Extractor; disengaged. "Tinctura," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C.

APPRENTICESHIP.

A PPRENTICE (in or out door), in good-class Retail and Dispensing Business within 30 miles of London; time for study and recreation; no Sunday duty; month's trial allowed, and personal interview desired; premium required. For terms, &c., apply to C. Trubshaw, Chemist and Druggist, High Street, Chesham, Bucks.

MISCELLANEOUS.

A GENCY for Germany wanted for well-advertised Patent Pills or Medicines; security given; London experience. Address, P. B., Box 2,417, Sell's, Fleet Street, E.C.

HOMOEOPATHY.

A PRIZE OF TWENTY-FIVE GUINEAS will be given by Major Wm. Vaughan Morgan, the Chairman of the London Homoeopathic Hospital and Medical School, for the best Essay on Medical Treatment, with special reference to the Scientific System of Hahnemann. There will be no restrictions as to title or mode of exposition, but the essays are not to exceed 28 pages octavo, bourgeois (about 13,000 words), and must be received at the Homoeopathic Hospital, Great Ormond Street, London, not later than the 10th April, 1886, signed by a motto, and accompanied by a sealed envelope, bearing the same motto outside, and enclosing the full name and address of the writer. The Essays will be adjudicated on by a Committee elected from the British Homoeopathic Society and the Board of Management of the Hospital. It is intended to issue a first edition of 50,000 copies of the selected Essay, and a similar issue will probably be made in the United States.

A N ESTABLISHED NEW YORK COMMISSION AGENCY, representing well-known English Manufacturing Chemists, and now doing an extensive business with the wholesale Drug Trade of America, can introduce Specialties to advantage; highest references; correspondence solicited. Address, F. J. M., care of THE CHEMIST AND DRUGGIST, 41 Temple Court, Beekman Street, New York, U.S.A.

TOILET SOAPS AND PERFUMERY.

Chemists get the **Best Quality at Lowest Prices** direct from the Manufacturers. Before purchasing your Spring Stock send for

J. W. MARTIN & CO.'S PRICE LIST,
PENG, LONDON, S.E. [No Travellers.

TYRER'S SAUCES

AND

"BOROUGH" KETCHUP.

BEST VALUE THAT MONEY CAN BUY.
FOR CASH BUYERS ONLY.

"Borough" Ketchup—

Large Bottles (1d. size) in doz. pareels	...	per gross	5 6
$\frac{1}{4}$ Bottles (flat reputed Half-Pints)	...	"	16/
Imperial Half-Pints (round stoppered bottles)	...	"	32/
In 12 $\frac{1}{2}$ gallon casks (casks free)	...	each	20/

Worcester, Harvey, Yorkshira, or Reading Sauce—

Large Bottles (1d. size) in 1 dozen pareels	...	per gross	5 6
$\frac{1}{4}$ Bottles (reputed Half-Pints)	...	"	16/
$\frac{1}{2}$ Bottles (reputed Pints)	...	"	26/

Extra Quality, Worcester and Yorkshire Sauce—

Large Bottles (1d. size) in 1 dozen pareels	...	per gross	6 6
$\frac{1}{4}$ Bottles (reputed Half-Pints)	...	"	21/
Imperial Half-Pints	...	"	36/

SAMPLES OF ANY KIND SENT FREE OF ALL COST BY

PETER TYRER.

The "Borough" Ketchup and Sauce Maker,
LONDON, S.E.

SCOTCH AGENCY: 115, WEST NILE STREET, GLASGOW.

SPONGE.

M. PETERSON & CO., Importers,
66 SOUTH JOHN STREET,

LIVERPOOL.

For Home, Foreign, and Colonial Markets.

Wholesale only.

GUM EBANI.

BEST AND CHEAPEST SUBSTITUTE FOR GUM ARABIC.

RABE & KUNTZE, Magdeburg.

HOLLOWAY'S PILLS & OINTMENT

Have the Largest Sale of any Medicine in the World
MANUFACTURED ONLY AT

Professor HOLLOWAY'S Establishment
78 New Oxford St. (late 533 Oxford St.), London
And sold at 1s. 1 $\frac{1}{2}$ d., 2s. 9d., 4s. 6d., 11s., 22s., and 33s. each Box or Po.

Chemists and Druggists selling "Holloway's Pills and Ointment" can, on application to the above address, or to the Wholesale House with whom they deal, be supplied free of charge with Handbills and Posters with their name and address printed at foot.

Wholesale Terms are List of "Proprietary Articles" in most Price Currents.

EXCHANGE COLUMN.

TERMS.—Announcements are inserted in this column at the rate of one halfpenny per word, on condition that name and address are added. Name and address to be paid for. Price in figures counts as one word. If name and address are not included, one penny per word must be paid.

DEPOSIT OF MONEY.—In order to ensure safety we offer the following system:—The Purchaser of anything advertised in the Exchange Column may remit the amount to us. We acknowledge receipt to both parties by post-cards, and only pay the money deposited on the advice of the remitter. Whether returned to him or paid to the seller, we charge a commission of 6*l.* on any transaction of 3*l.* or less, or 1*s.* if above that amount.

Please note that the Exchange Column will appear Weekly. Advertisements must be received not later than Thursday in each week. Chemists will do well to look up their Surplus Stock and send an Advertisement of same.

FOR DISPOSAL.

Drugs and Chemicals.

About 40 lbs. of Maw's Ellesmere flax lint, in good condition, 1*s.* 6*d.* lb. Miller, 102 Fortress Road, Kentish Town, N.W.

16 oz. lacturium, at 1*s.*; 18 oz. ol. cubebæ, at 1*s.*; all or part; post free. Floyd, Bury St. Edmunds.

Winchester ess. bergamot and lemon, 8*s.*, 7*s.* lb.; pot. iodid., 9*s.* 6*d.* lb.; hyd. iodid. rub., 6*d.* oz.; 4 lbs. bismuth, 7*s.* lb. Cook, Chemist, Middlesborough.

New essence lemon, extra super. — Having bought early and largely, we are able to offer a limited quantity at considerably under market rates; own import; quality second to none; sample and price on application; state quantity required. W. Kemp & Son, Herecastle.

Proprietary Articles.

Five doz. Barrow Evans' hair restorer; offers solicited. Mainprize, Chemist, Brighthelmton Quay.

One and a half doz. Hayman's balsam horchound, 1*s.* 1*d.*; 3 doz. each Chinese corn plaster, 3*d.* and 6*d.*; what offers? 241/2.

Chamney's poultry and chicken spice, about 50*s.* worth; cheap, or exchange. Stanford, Stamford.

Educational.

British Encyclopedia, 8 vols., bound half-calf, 16*s.* Eley, 14 Lee Mount, Birmingham.

To Students. — Attfield's "Chemistry," 5*s.*; Wills' "Pharmacy," "Materia Medica," 2*s.* each. Write for list. Robert Watts, Chatham, Kent.

Pereira's "Materia Medica," 3 vols., half leather bound, good condition, published at 3*l.* 12*s.*, for 30*s.*; materia medica cabinet, over 100 specimens, in good condition, for 5*s.* Staley, Chemist, Burton-on-Trent.

"Dispensing Notes," complete, as given at well-known College of Pharmacy, including copious hints on difficult pills, emulsions, suppositories, &c., with valuable "tips" for the examination room; post free 1*s.* 1*d.* Clifton, 13 St. Michael's Terrace, Wood Green, London.

Literature.

Chemist and Druggist, odd numbers, 1851 to 1877, 1878 to 1885, complete, 5*s.* 6*d.* vol., carriage free 6*s.*, over 100 to 200 miles, single copies 9*d.* to 1*s.*, post free; *Journal*, odd, 1872 to 1885, 3*d.*, free, quantity less; *Diary*, 1876 to 1880, 2*s.* 6*d.*, free, or what offers? Williams, Chemist, Coleford, Gloucestershire.

Chemist and Druggist, 1830 to 1835, both inclusive complete, for 10*s.* 241/4.

Pharmaceutical Journal for 1885, half purple calf, cheap, for offer. Balchin, 1 High Street, Margate.

Shop Fittings.

Two ornamental iron carboy-brackets, by George Treble & Son, in good condition, for 1*l.* 239/32.

Twenty 4 lb. blue gold labelled ointment jars, 2*s.* 8*d.* each; 4 engraved acid bottles, 4*s.*; 4 gallon iron mortar and pestle, 18*s.*; pair 4 lb. French counter-scales, 15*s.* 6*d.*; pair 10 lb. ditto, 18*s.*; pair 4 lb. marble ditto, 17*s.*; 4 oz. verified measures, 10*s.* dozen; pint tincture press, 4*s.* 6*d.*; six 40 oz. glass capped oil bottles, 13*s.*; 16 oz. blue (plug) syrup bottles, 9*d.* each; ten 20 oz. ditto, 8*s.*; nine 30 oz. ditto, 8*s.* 6*d.* Simecock, 17 Guildford Street, Leeds.

Two handsome mahogany and plate-glass wall-cases, 8 ft. long and 9 ft. high each; 1 mahogany writing-desk, with mahogany glass case in front, price 2*l.* 15*s.*; mahogany and plate-glass sponge-case, 3*l.*; an upright mahogany glass case, to open with 2 doors, 2 ft. 6 in. long, 2*l.* 10*s.*; plate-glass toothbrush case, 1*l.* 10*s.*; a large quantity of drug-drawers, shelving, &c., all very cheap. Bygrave, 12 Curzon Street, Wenlock Street, New North Road, London, N.

Dental cabinet, fitted with 7 drawers, polished mahogany, 28*s.*; dental instruments; brass pillar scales; dispensing ditto; 12 ft. fixture drawers; lockers; shelving, a good lot, 7*l.* 10*s.*; 12 ft. Spanish mahogany counter; 9 ft. ditto ditto; several mahogany-top counters, grained mahogany fronts; 2 ft. counter-case, 30*s.*; 2 ft. 6 in., 35*s.*; 3 ft., 40*s.*; 5 ft. ditto, ditto, A 1, 9*l.*; 3 ft. bent plate-glass counter-case, A 16, 55*s.*; 3 ft. 6 in. ditto, ditto, 60*s.*; 4 ft., 70*s.*; 4 ft. ditto, ditto, as fig. A 17, 75*s.*; 2 ft., 3 ft., and 4 ft., as fig. A 3; 6 ft., as fig. A 8; 4 ft., as A 7; 8 ft., fig. A 15, 7*l.*; toothbrush-case, as fig. A 9, 35*s.*; A 10, 50*s.*; ditto, ditto, open at back, 30*s.*; cigar-case, as fig. A 33, 7 holes, 60*s.*; desk and case, as fig. A 31; show steps, A 37, 60*s.*; sponge-cases, A 41, 60*s.*; A 43, 3 ft. long, 95*s.*; dispensing-screens, 4 ft. long, A 54; 5 ft. long, A 55; and 6 ft. long, as A 55; 7 ft. 6 in. long, ditto, ditto; 5 ft., 6 ft., 7 ft. plate-glass dispensing screens, glass case at each end, with silvered plate glass centre, with marble slab in front, very elaborate, from 7*l.* 10*s.*; 10 ft. and 6 ft. plate-glass and mahogany counters, as A 64; mahogany wall-case, 7 ft. 7 in. long, 6 ft. 6 in. high, silvered plate-glass centre door, 8*l.*; ditto, ditto, 7 ft. 4 in. long, 35 in. high, 6*l.* 10*s.* E. Natali, 207 Old Street, near Pitfield Street, E.C.

Dispensing-scales, as Maw's fig. 7, nearly new; beam 13 in., base 9 in., weights, &c.; only 13*s.*, carriage paid. Brooks, Chemist, Louth.

Looking-glass, 57 in. by 36 in., in broad, handsome, moulded mahogany frame; mahogany wall-cases; bottles and jars; store-bottles, &c. A. B. C., 112 High Street, Woolwich.

12 ft. run drawers, shelving, and lockers complete, mahogany-fronted, gold-labelled, 7*l.* 10*s.*; 10 doz. good gold-labelled shop rounds, regular lot, 7*s.* 6*d.* doz.; blue ex. pots; 6, 4 gal. earboys and stands, cut stoppers, 10*s.* each; 6 doz. $\frac{1}{2}$ gal. black stock bottles, japanned caps, gold-labelled; 12 doz. 24 pink ointment jars, dome covers, gold-labelled, 3*s.* 9*d.* each; a quantity of composition mortars; tincture-press; marble mortars; 3 specie-jars, 27 in. high, glass gold covers, 25*s.* each; 1 pair ditto, ditto, as Maw's list, on octagon mahogany stands, glass gold covers, total height 35 in., 6*l.* pair, worth double; pill-machines to cut 24 (3, 4, or 5 grain), 16*s.* E. Natali, 207 Old Street, near Pitfield Street, E.C.

Formulæ.

Approved Formulæ.—Corn solvent, chlorodyne, pile remedy, ginger-beer powders, hop bitters, kali; hundreds of others; 6*d.* each. 241/2.

Worth 5*l.*—I will dispose of two commercial trade recipes (would suit chemist) successfully made and sold by me for years; no plant, large profits, great demand; the two for 2*s.* 6*d.*, with sample 3*s.* A. Deane, 109 Napiershall Street, Glasgow.

Reliable formulæ at modest prices; Brooks' recipes have stood the test over five years, their worth is verified by 1,100 chemists; see "How a Chemist made a Fortune," in first issue in month; detailed lists free; latest recipes are—"Quinine and Iron Tonic Pills," equal any liquid preparation advertised, convenient, reliable, efficacious; "Bronchelixir," safe, certain remedy for chest affections; "Glycerine Cream," perfection of toilet requisites, large sale guaranteed; "Trixy," most delicious and enchanting bouquet; splendid perfume for local name; recipes 1*s.* 1*d.* each, 3 for 2*s.* 6*d.*, free, with full instructions. T. Brooks, Chemist, Louth, Lincs.

Miscellaneous.

Fine monocular microscope by Nachet, with 3 eyepieces, 6 objectives, camera-lucida, spot-lens, &c., in case; price 11 guineas. Senior, 69 Piccadilly, Manchester.

Portable 5 gal. copper still, in good condition, with worm complete, heated by gas or fire; offers wanted. Stevens, Chemist, Wigmore Street, London.

5 cwt. thumb blue, tool chest, 7s. 6d.; 7-ft. knee-hole mahogany desk, 60s.; also stool, 6s.; feeler corks. Wilks, Barn'ey.

Trusses, plain principle (Gray, Sheffield 1, maker).—Adult sizes: 6 doz. right and left, 3 doz. double; children: 4 doz. single, 3 doz. double; no reasonable offer refused. Address, Barron, Harveys & Co., Giltspur Street, London, E.C.

Microscope in mahogany box, fitted with mirror-reflector, variable eye-piece, 5 objectives and other accessories, cost 42s.; also 8-doz. 1s. 1½d. size assorted "medicated grapes"; what offers, cash or exchange? Sneed, Chemist, Keighley.

Surplus Stock.—23 lbs. hydrarg. sulph., 2s.; 14 lbs. gum olibani, 10d.; 4 oz. croton chloral, 2s.; 3 lbs. chloroform, 4s.; 10 lbs. tinct. gent., 2s.; 4 oz. ol. santal flav. ang., 1s. 4d., &c.; gross vaccination shields, 24s.; 15 doz. Herbert's glue, 3s.; large quantity glass syringes, enemas, &c.; also 54 in. Timberlake bicycle, ball bearings, cost 15l., 7l. Gerring, Chemist, Witney.

1-pint tincture press, 4s. 6d.; 5-pint seltzogene (inner tube broken), 5s.; 13 bottles pure chemicals for analysis (average 4 oz.), 8s.; Books: Fowne's "Chemistry," 1873, 5s.; "Selecta à Prescriptis," 1s. 6d.; Bentley and Redwood's "Pereira," 1874, 8s.; Fluckiger and Hanbury's "Pharmacographia," 1874, 6s.; Bloxam's "Metals," 1881, 2s.; Symes' "Surgery," 3s. 6d.; Lescher's "Elements," 1869, 3s. A. Law, 37 Crayford Road, Holloway, London.

Large Oertling balance, 15-inch beam divided, rider slides, agate plates; also a small balance. Inspection at Hart's Chemical and Photographic Apparatus Manufactory, 8 Kingsland Green, Dalston Junction, London.

Surplus sundries, all guaranteed in perfect condition:—3 grs. best white teats, 4s. grs.; 5 grs. black teats, 5s. grs.; black tubing, 7s. lb.; 12 doz. bent feeders, black fittings, 27s.; 6 doz. ditto, red, 13s.; 1-oz. stoppered "Lubins," 16s. 6d. grs.; 10, 30-oz. oil bottles, 1s. 8d. each; 5 grs. each, 3 and 4 oz. dispensing bottles, 6s. grs.; ditto, 6 and 8 oz., 7s. grs.; 1 gr. 3-oz. wood-capped pomade bottles, 12s. 6d.; 2-oz. deep nested willows, 2s. 9d. grs.; cream white demy, 4s.; blue ditto, 6s. 6d.; ditto, seillitz, 6s. 9d.; 6 Higginson's enemas, complete, 12s.; 3 grs. 1d. furniture cream bottles, 6s.; 300 8-inch filtering paper, 2s.; 1 doz. cut champagne glasses, 10s.; 6 cut "sherries," 4s.; 6 star cut ports, 4s. 6d.; best vial corks, 6d. grs.; 2 green enemas, complete, for 3s.; Boats feeders, 3s. 6d. doz.; glass nipple shells, 1s. 10d. doz.; 12 grs. 1-dram pink bats, 4s.; 1 doz. porcelain sick feeder cups, 4s. 6d.; 4 gross 1½-oz. vials for 15s.; 3 grs. 2-dram, 8s.; 2 grs. 1-oz., 5s. 9d.; 2-oz. heavy panelled flats, 7s. grs.; 6 doz. 1-oz. glass opal covered pots, 8s.; 1 grs. 2-oz. nickel screw pomades, 17s.; 1½-in. flat varnish brushes, 4s. 6d. doz.; 1,000 soft copaiba capsules, 7s. 3d.; 1 grs. 8-oz. plug salines, 13s. 6d.; 12 grs. ginger-beer corks, 8s. Simcock, 17 Gaidford Street, Leeds.

WANTED.

Glass case, 4 ft. by 9 in. by 3 in. 24l/4. Any numbers Micrographic Dictionary. Balchin, 1 High Street, Margate.

Pill coater and mixing machine; state make, lowest price, to Davies, Coleford.

Six large wickered jars with taps. Awbery, Henley, Oxon.

Oil pump (patent measuring) by R. F. Dale & Co., London. Aspinall, Platt Bridge, Wigan.

Cassell's "Family Physician," bound. Price to Harvey, 1 Claremont Road, Surbiton.

Two 6-gal. show carboys with stands; also 2-grain pill-machine. Bostock, Chemist, Hyde.

Will's "Text-books." Address, M., 18 Norwich Road, Ipswich.

Essence spruce in Exchange; see offers in March 6; paint mill, Enterprise drug mill, Wilks, Burnley.

Babington's "British Flora," 10s. 6d.; latest edition. Frank Browne, 32 Gold Street, Northampton.

Cooley's "Receipts," Squire's "Companion," latest edition. Kniveton, Lord's Mill Street, Chesterfield.

Dispensing-screen 66 in.; 3 upright counter-cases, 30 in. long, 24 high; 62-lb. glass jubuc jars, labelled; *Pharmacopœia*, 1885; small printing-press; dispensing scales, grain. Edgecombe & Stannes, Tavistock.

READY. 2nd edition, post free, cloth, 2s. 6d., from J. & A. CHURCHILL.

GUIDE TO THE NEW B. P.

Epitome of Changes, Descriptions of all the NEW PREPARATIONS, their Properties, Uses, Doses, &c.; with Therapeutical Commentary.

By PROSSER JAMES, M.D.,

Lecturer on Mat. Med. Lond. Hospital, Physician to Throat Hospital, &c.

Also by the same Author,

Laryngoscopy and Rhinoscopy, with coloured plates, 6s. 6d. 4th ed.; also Therapeutics of the Respiratory Passages, 10s. 6d. Baillière & Co.

THE LONDON HOMŒOPATHIC HOSPITAL AND MEDICAL SCHOOL, GREAT ORMOND STREET.

A NEW WARD, unoccupied for want of funds, is much needed for Male Patients, and will be opened as soon as sufficient funds to support it are received. The Hospital now contains eighty beds. Trained Nurses are sent out at moderate fees for Medical, Surgical, or Accommodation cases, the latter specially Certificated.

G. A. CROSS, Secretary.

SOUTH LONDON SCHOOL of PHARMACY,

325 KENNINGTON ROAD, S.E.,

Director: Dr. JOHN MUTER, M.A., F.I.C., F.C.S., &c.

ESTABLISHED 1ST OCTOBER, 1868.

EIGHTEENTH SESSION, 1885-6.

The next Term will commence on April 15, 1886.

For Fees, &c., apply to W. BAXTER, Secretary.

IMPORTANT TO CHEMISTS.

Many leading Physicians, both in London and the Provinces, are prescribing from

"THE PHYSICIAN'S PHARMACOPŒIA."

For the only perfectly reliable method of preparing "TABLETTE NITRO-GLYCERINII B.P.," see "THE PHYSICIAN'S PHARMACOPŒIA," price 3 6, from all Booksellers.

Published by J. & A. CHURCHILL, 11 New Burlington Street, London.

NURSING INSTITUTE,

London Homœopathic Hospital, Great Ormond St., Bloomsbury.

PROPERLY QUALIFIED NURSES, trained in the wards of the Hospital, can at all times be obtained for either medical, surgical, and accouchement cases. For monthly nursing Certificated Nurses, trained in the Hospital and in Lying-in Institutions, are retained. Telegraphic address—"Homœopath London."

STUDENTS' AIDS TO EXAMINATION.

PRELIMINARY.—Arithmetic and Metric System, 1s. How to Write an Essay, 6d. Latin Grammar and Cæsar Simplified, 1s. MINOR—Equations Simplified, 1s. Illegible Autographic Prescriptions, 1s. Minor Questions, gratis. Notes on Dispensing, 1s. Prescriptions given at the Minor, 1s. For "How to Prepare for either Exam.," enclose stamped envelope, "Chemist," care of Mr. J. EDWARDS, Wye, Kent.

TULLY'S POSTAL TEACHING,

For the Minor, Modified, and Preliminary,

WAS established in 1872, and notwithstanding many imitations, continues to hold its prestige as the best and most successful method ever offered to Students for obtaining that thorough knowledge necessary to qualify for Examination, without leaving home. Every Student desiring to ensure success should study under this system. Fees: Minor or Modified, One Guinea; Preliminary, 10s. 6d. Send for particulars to

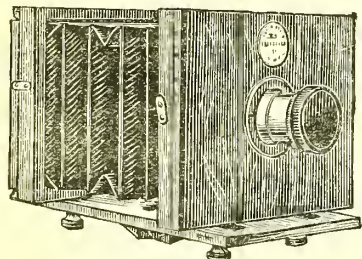
Mr. J. TULLY (Hills Prizeman), 185 St. George's Road, West Hill, Hastings.

PHOTOGRAPHIC APPARATUS,

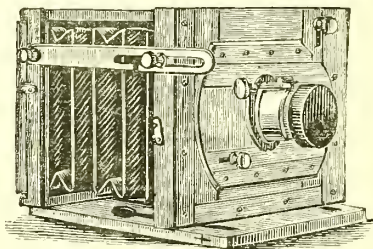
FOR TOURISTS, BICYCLISTS, TRICYCLISTS, ETC.

Over 18,000 Now Sold.

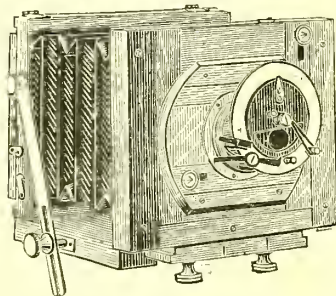
Each Apparatus includes CAMERA LENS and STAND. CYCLE CLIP may be had in place of STAND.



LE MERVEILLEUX.



LE MÉRITOIRE.



THE INSTANTOGRAPH.

EACH APPARATUS

GUARANTEED PERFECT. LENSES EQUAL

TO BEST MONEY CAN PURCHASE.

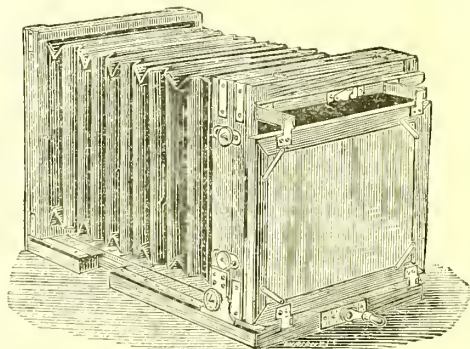
	1	2	3	4	5
Le Merveilleux	£1 1 0	£2 2	£3 3	£4 4	£5 5
Le Méritoire	1 11 6	3 3	4 10	6 0	7 10
The Instantograph...	2 2 0	4 4	6 6	8 8	10 10
The Ladies' Camera...	1 15 0	3 0	4 5	5 10	7 0
The Patent Camera } (no Lens or Stand) }	2 10 0	4 0	5 0	6 0	7 0

Sets of Plates, Dishes, Chemicals, Lamp, &c., with full instructions, $\frac{1}{4}$, 6/6; $\frac{1}{2}$, 12/; $\frac{3}{4}$, 20/; 10 by 8, 25/.

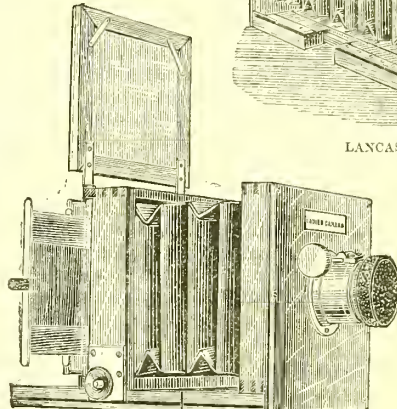
Sets of Printing Materials, Sensitised Paper, Printing Frame, Dishes, Toning and Fixing Solution, and full instructions, $\frac{1}{4}$, 5/; $\frac{1}{2}$, 10/6; $\frac{3}{4}$, 15/; 10 by 8, 21/.

Dry Plates, $\frac{1}{4}$, 1/6; $\frac{1}{2}$, 3/6; $\frac{3}{4}$, 7/; 10 by 8, 11/ per doz.

Instantaneous, $\frac{1}{4}$, 2/; $\frac{1}{2}$, 4/; $\frac{3}{4}$, 8/; 10 by 8, 12/ per doz.



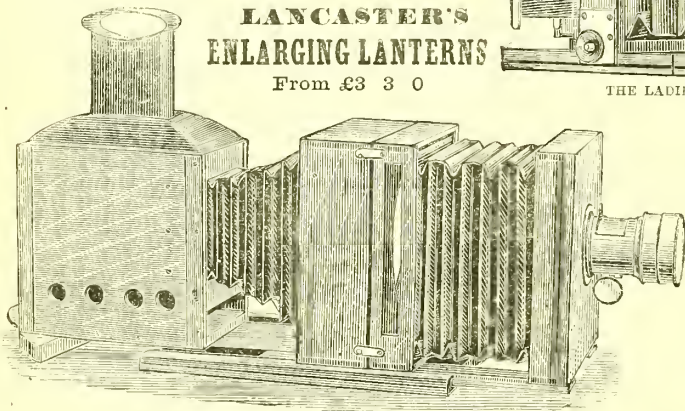
LANCASTER'S PATENT CAMERA.



THE LADIES' CAMERA.

LANCASTER'S
ENLARGING LANTERNS

From £3 3 0



LANCASTER'S ENLARGING LANTERN

Illustrated Catalogue

Post Free

to Chemists.

TENTH THOUSAND.

"How to be a Successful Amateur Photographer," by W. J. Lancaster, F.C.S., &c., 64 pp., 6 Stamps.

SPECIAL TERMS
TO CHEMISTS.

J. LANCASTER & SON, OPTICIANS, BIRMINGHAM.

JUDSON'S SPECIALITIES.

Dyes, Gold Paints, Artists' Black, Krokum, Filters,
Marking Ink, Cooling Crystals, Wood Stains, &c., &c.
ARE NOW BEING VERY LARGELY

ADVERTISED EVERYWHERE !!

ILLUSTRATED CATALOGUE AND TERMS ON APPLICATION TO

DANIEL JUDSON & SON, Lim., 77 Southwark Street, LONDON.

PHOENIX ESTABLISHED A.D. 1815 **MARKING INK**


GENUINE INDELIBLE

THE LEADING & STANDARD ARTICLE

PREPARED ONLY BY THE WIDOW OF THE LATE
JOHN MURPHY
CHEMIST AT THE ORIGINAL ESTABLISHMENT
11, NILE STREET, EAST ROAD, HOXTON, N.



MANUFACTURER OF INDELIBLE MARKING INK.
TO HER MAJESTY'S ARMY CLOTHING DEPARTMENT.



THE ORIGINAL
TRADE MARK.
Estab'd 1815.

NO OTHER ADDRESS - BEWARE OF WORTHLESS IMITATIONS.

INCREASE YOUR INCOME.

We are now appointing Agents for our renowned Indian Teas, in $\frac{1}{4}$, $\frac{1}{2}$, and 1 lb. Packets. Gives no trouble; interferes not with ordinary business; and ensures a COMFORTABLE INCOME.

Applications to
BROOKE, BOND, & Co.,
Wholesale Tea Blenders
to the Trade,
17, Piccadilly, Manchester.

Two Tailings?



Impossible!

THE Most Admirable
TEA
@ 2/- per lb
Sold only by
BROOKE, BOND & Co.
PICCADILLY & MARKET ST.
MANCHESTER.

H. NEWTON & CO.,

MANUFACTURERS AND EXPORTERS OF

PHOTOGRAPHIC APPARATUS AND CHEMICALS,

5 SOUTH JOHN STREET, LIVERPOOL, ENGLAND.

NEWTON'S NEW "ORTHOPANACTNIC" LENS, acknowledged to be the most perfect Lens made, for Landscapes, Portraits, Architecture, Groups, and Copying. Cash returned, if Lens is not perfectly satisfactory.

EWTON'S NEW PORTABLE CAMERA, being the lightest, strongest, and most convenient Camera in the market, from 3 inches to 17 inches focus, rack adjustment, rising and falling front, swing back, &c. Price, with 3 double dark slides, £8 8s.

NEWTON'S "MULTUM-IN-PARVO" TRIPOD STAND (Sharp's Patent), simply marvellous, packs into small sling case, 5 x 5 x 2 inches, when erected will support a weight of 56 lbs. Price 25s.

NEWTON'S NEW WASHING APPARATUS, will remove every trace of Hypo from a dozen plates or 100 prints in an hour, constructed on an entirely new principle. Prices, $\frac{1}{2}$, 15s.; $\frac{1}{4}$, 21s.

NEWTON'S NEW HEADREST for AMATEURS, can be attached to any chair. Nickel plated, handsome in appearance, and very portable. Price 12s. 6d.

NEWTON'S "TOURIST" OUTFIT, comprising handsome Mahogany Bellows-body Camera, Achromatic Lens, and Folding Tripod Stand, for plates $6\frac{1}{2} \times 4\frac{1}{2}$, 45s.; ditto for plates $4\frac{1}{2} \times 3\frac{1}{2}$, 31s. 6d.

NEWTON'S "TOURIST" RUBY LAMP, very portable, for Bicyclists, &c., folds into one inch. Price 3s.

NEWTON'S PERFECTION DRY PLATES are unequalled for rapidity and general excellence. $\frac{1}{4}$, 1s. 6d.; $\frac{1}{2}$, 3s. 6d. doz.

All articles connected with Photography at **LOWEST POSSIBLE PRICES** consistent with high-class work. All the Latest Novelties.

H. NEWTON & CO., 5 SOUTH JOHN STREET, LIVERPOOL.
N.B.—Wholesale Terms on application.

This Unique Preparation has the extraordinary property of keeping the

HAIR IN CURL.

Now used by Ladies in all parts of the World.

Needs but an introduction to command a ready and constant sale.

FRIZZETTA
REGISTERED.
RETAIL 1/6.

Supplied by all London Pat. Medicine Houses. Handsome Show-cards, Glass Tablets, and Circulars profusely supplied.

Foreign and Colonial Chemists should write for Terms, &c.

F. W. BATES, CHEMIST,
BROOK'S BAR, MANCHESTER.

JAMES'S TOILET SPECIALITIES.

JAMES'S HERBAL OINTMENT, for the Cure of Pimples, Black Specks, Blotches, &c., and taking away Tan Freckles, Sunburn, &c. Sold by all Chemists, 1/1½ and 2/9 per box.

JAMES'S DEPILATORY,

For the instant removal of Superfluous Hair. Sold by all Chemists, 1/- and 2/- per box.

JAMES'S HERBAL POMADE,

For Promoting the Growth of the Hair, Whiskers, Beard, Moustachios, Eyebrows, and Eyelashes. Sold by all Chemists, 1/- and 2/- per box.

These Articles are well worthy the attention of Chemists, Wholesale Houses, and others, as they are being well advertised.

JAMES & CO., 268 (late 226) Caledonian Rd., London, N.

TOILET SPECIALITIES.

STURROCK'S OLEAQUA, OR HAIR WASH AND OIL IN ONE! The roots, and imparts a smooth, glossy, and sufficiently moist appearance to the hair without actually greasing it, quite superseding the use of the ordinary Pomades, Oils, or Hair Washes, and particularly suitable for warm climates.

Price 3/6, 5/-, 7/6, 10/-, 21/-.

NOTE.—The celebrity obtained by this article having caused several spurious imitations, it is necessary to observe that the original and only genuine is **STURROCK'S OLEAQUA**.

STURROCK'S COMAURINE, OR GOLDEN-AUBURN HAIR LIQUID. A safe, certain and satisfactory preparation for producing this fashionable colour of hair, retaining at same time its natural softness and beauty. 5/ and 10/ each bottle.

—The above articles are prepared only and sold by

STURROCK & SONS,

Perfumers to Her Majesty the Queen, H.R.H. the Prince of Wales, and H.R.H. the Duke of Edinburgh.

66 REGENT STREET, LONDON;

33 PRINCES STREET, EDINBURGH

123 BUCHANAN STREET, GLASGOW.

And may also be obtained through any of the Wholesale Drug & Perfumery Houses.

Matthews's Fullers Earth.

Used in the Royal Nurseries, and highly recommended by the Faculty; it protects the Skin from cold winds, chaps, &c., and preserves the Complexion.

SOLD BY ALL THE WHOLESALE HOUSES.

ROUSE & CO., 12 WIGMORE STREET, LONDON.

ESTABLISHED 1814.

TRUSSES.

ESTABLISHED 1814.

W. A. SCOTT, 2 HOWARD STREET, SHEFFIELD,

Manufacturer of all kinds of SURGICAL INSTRUMENTS AND BANDAGES.

SINGLE TRUSSES, 12/- DOZ.; DOUBLE DO., 21/- DOZ.

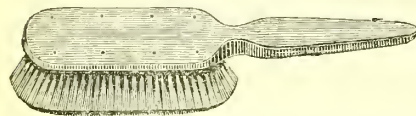
N.B.—All my Trusses are made exact shape to the body, and made from Best Sheffield Steel. For quality and price they are unequalled.

DUKAS & CO., 20 Red Lion Square, LONDON, W.C.

WHOLESALE BRUSH MANUFACTURERS,

The largest assortment of Brushes kept in our London Warehouse, and a Showroom of several thousand different patterns.

SPECIAL QUOTATIONS TO LARGE BUYERS.



We supply our Brushes over 25 per cent. cheaper than any English Brush Makers, and guarantee that quality cannot be surpassed. Our terms are net prompt cash, but Monthly Accounts can be arranged. Before opening new accounts we require the Banker's or two London Trade references, unless remittance is sent with order.

CATALOGUE OF SPECIALITIES JUST PUBLISHED.

BY A NEW PROCESS.

VEGETABLE PARCHMENT.

WATERPROOF AND GREASEPROOF.

AS SO LARGELY USED BY CHEMISTS, &c.

Size 20 in. x 30 in. (about 19½ lbs. per ream).

Prices—10d. Quire (24 sheets); 14s. Ream (480 sheets).

Sample Quire Post Free, 16 Penny Stamps.

Sample piece Post Free on receipt of Trade Card.

F. G. KETTLE

WHOLESALE AND RETAIL STATIONER,

11 KINGSGATE STREET, LONDON, W.C.

BY ROYAL LETTERS PATENT.

WATERPROOF & GREASEPROOF WAXED & SATIN PAPER

FREE FROM TASTE AND SMELL.

Used by Confectioners, Chemists, Soap Makers, Tobacconists, Silver-smiths, &c. SUPERSEDES TINFOIL or other substitutes.

Size—20x30	...	8s. 0d. per Ream.	7d. per Quire.
" 18x30	...	7s. 9d.	6d. "
" 15x30	...	6s. 6d.	6d. "

Sample Quire, Post Free, 10d.

Great reduction according to quantity. Special attention paid to Export orders.

HENRY MASON & CO.,

WAX PAPER MANUFACTURERS (the Original Makers),

Debnams Road, South Bermondsey, England.

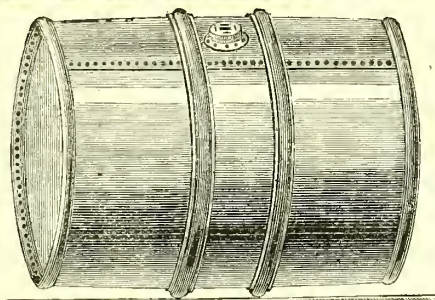
B. NOAKES & CO.,

MANUFACTURERS OF
Metallic Casks, Drums, & Kegs
ENAMELLED, PLAIN, AND DECORATED
TIN CANISTERS AND BOXES,
FOR PACKING CHEMISTS' AND DRUGGISTS'
FUNDRIES.

ENAMELLED SHOW CARDS.
IRON BARRELS,
CAPACITY 40 TO 120 GALLONS,
AS PER ILLUSTRATION.

Cable and Telegraphic Address—
"NOAKES LONDON."

Offices and Works: 142 SPA ROAD, BERMONDSEY, LONDON, S.E.



These large Iron Casks, similar to sketch, can be handled with equal facility to wooden barrels, and, owing to their strength and durability, can be used over and over again for an indefinite period. They are perfectly liquid tight, being tested at a very high air pressure, and, unlike wood, do not absorb any of the contents. They are all fitted with interchangeable screw bungs, and can also be fitted with screw plug in head, for draw-off tap.

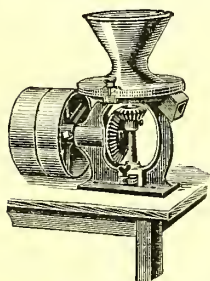
They are specially adapted for all kinds of Chemical Products, Sulphuric Acid, Glycerine, Spirits, Oils, Turpentine, Petroleum, Benzoline, Varnishes, Tar, Naphtha, Mineral Extracts, and Inflammable Liquids of every description.

We are making them in three qualities, "Black Iron," "Lead Coated," and "Tinned."

PRICE LIST ON APPLICATION.

FOLLOWS & BATE, LIM., Engineers,

Dutton Street Works, MANCHESTER.



NEW DRUG MILL,
For Ginger, Roots, and
all kinds of friable materials.

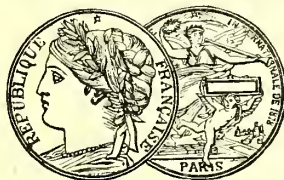
IMPROVED & LATEST MACHINERY

FOR

DRUG GRINDERS,

WHOLESALE

Chemists & Druggists



PARIS, 1878.



VIENNA, 1873

CHEMISTS'
HANDBILLS
Crown 8vo. } 5,000 6/9. 10,000 11/6
7 1/4 by 4 3/4 }
Demy 8vo. } 5,000 11/6. 10,000 18/-
8 1/4 by 5 1/4 }
CHEMISTS' MEMORANDUM FORMS.
Litho, 1,000, 9/6 3,000, 18/- 5,000, 25/-
Type, 1,000, 6/- 3,000, 15/- 5,000, 20/-
CHEMISTS'
LABELS
Type Slips, 10,000 in ten kinds for 10/-
JAMES TOWNSEND,
MEDICAL LABEL PRINTER,
EXETER.

THE ORIGINAL ARNICATED WHITE FELT CORN AND BUNION PLASTERS,

INVENTED AND ESTABLISHED BY

HENRY YOUNG,

A.D. 1846,

AND FAVOURABLY KNOWN ALL OVER THE GLOBE.

SUPPLIED BY ALL WHOLESALE HOUSES.

N.B.—Please see that YOUNG'S Goods are supplied, as there are many worthless imitations.

Manufactory, 72 Clerkenwell Road, London, E.C.

(LATE OF CARTHUSIAN STREET.)

NITROMETERS.

B.P., 1885.

Allen's Nitrometer, as suggested by A. H. ALLEN, Esq., for the estimation of Nitrous Ether in Spts. Ether. Nit. (see *Pharm. Journ.*, Feb. 21st, 1885, page 673), and now authorised in the B.P., 1885 (page 378).

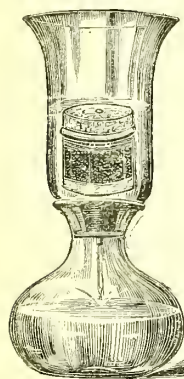
Price 8/.

The C. P. S. Duplex Clip for ditto, adapted to
any ordinary stand, each ... 3/6
Clip, Wood Stand, and Nitrometer complete ... 12/6
" Iron " " ... 15/-

CUBLEY & PRESTON, 4 HIGH ST., SHEFFIELD,

Makers & Importers of Chemical & Philosophical Apparatus.

CHEAP GLASS FILTERS.



Style "K."

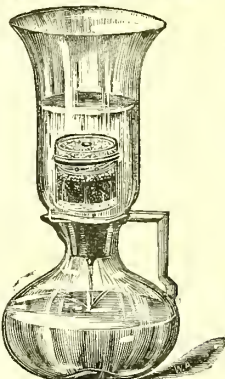
The **ONLY** Reliable
Filters.

Made at **OUR OWN**
Glass Works.
No Intermediate Profits.

STYLE "K."—Plain: 1 pint, 2;
2 pints, 3; 3 pints, 4. Engraved:
1 pint, 2 6; 2 pints, 4; 3 pints, 5.

STYLE "L."—Plain: 1 pint, 3;
2 pints, 4; 3 pints, 5. Engraved:
1 pint, 3 6; 2 pints, 5; 3 pints, 6.

STYLE "M."—Plain: 1 pint, 4;
2 pints, 5 6; 3 pints, 6 6. Engraved:
1 pint, 4 6; 2 pints, 6 6; 3 pints, 7 6.



Style "L."

Very **LIBERAL** Discount
to the Trade.

Judson's GLASS WORKS,
ORMSIDE STREET,
OLD KENT ROAD, LONDON.

D. JUDSON & SON

(LIM.),

SOUTHWARK STREET,
LONDON.



Style "M."

ARTISTIC SHOP FITTINGS

FOR HOME AND EXPORT.

Our **NEW CATALOGUE** sent free on receipt of Business Card.

JOHN CURTIS & SON, WADE STREET
and WADE LANE, **LEEDS.**

ESTABLISHED 1852.

CHEMISTS' SHOP FITTINGS.

Economy, with Excellence of Design and Workmanship.

Chemists fitting up or re-fitting should write for **R. Tomlinson & Sons' Illustrated List of Modern Shop Fittings of own manufacture,** comprising:—

Desks and Glass Cases, from 50s.
Bent Front Counter Cases, 3 ft. long,
50s.
Ditto, ditto, 6 ft. long, 105s.
12 ft. Nest of 66 Pine Drawers, gold
labels and glass knobs, £6 6s.
12 ft. Nest Mahogany ditto, £8 15s.
Dispensing Screens, from 100s.
Mahogany and Pine Top Counters.
Glass Casing for Counter Fronts.
Bevelled Plate-glass Window Tablets.
Plate-glass Show Case, 36 by 18, 32s. 6d.

Tooth Brush Cases, from 31s. 6d.
Glass Knobs, 21s. per gross.
Gold Paper Labels and Bevelled Glass
Labels for affixing on Drawers.
Show Carboys, from 3s. each.
Stoppered Shop Rounds, labelled to
order.
Specie Jars re-labelled.
Special Line in Marone Shop Jars.
Plate Glass Shelves for Shop Windows.
Slide Pillar Dispensing Scales on Ma-
hogany Box, warranted, 19s. pair.
Dispensing Scales, Tripod Pillar.

NOTE CHANGE OF ADDRESS:—

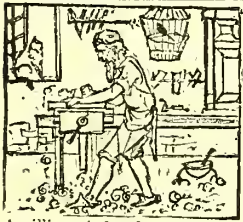
R. TOMLINSON & SONS,

Midland Medical Fitting and Druggists' Sundries Warehouse, Bond Street, Constitution Hill, BIRMINGHAM.
REMOVED FROM ST. PAUL'S SQUARE. Established Half a Century.

GEORGE TREBLE & SON, CHEMISTS' SHOP FITTERS AND SHOW-CASE MAKERS.

PLANS AND ESTIMATES SUBMITTED.

FACTORY: 27 CANAL ROAD WHITMORE RD., HOXTON, LONDON, N.



A willing mind makes light employment.

BOWLING & GOVIER, MEDICAL SHOP FITTERS AND CASE MAKERS, GUN STREET, BRUSHFIELD STREET, BISHOPSGATE, LONDON.

Send for Estimates and List of Shops Fitted in our Modern Style.

BEST WORKMANSHIP ONLY, AT PRICES THAT WILL INSURE SATISFACTION.

NOTICE! 66 PENTONVILLE ROAD, N. SOLE ADDRESS.

LEMAITRE & CO.

(ESTABLISHED 1830),

MEDICAL AND GENERAL

SHOP FITTERS,
WRITERS, DECORATORS, &c.

SEND FOR OUR ILLUSTRATED LISTS.

Best Manufacture and Seasoned Wood.

£50

COMPLETE FITTINGS

FOR

CHEMISTS' SHOPS.

£100

COMPLETE FITTINGS

FOR

CHEMISTS' SHOPS.

NOTICE FOR REFERENCES.

J. JAMES, Thayer Street, W.; New Cross Road; Upper Tulse Hill, Brixton, and 260 Up per St., Islington.
Mr. DADSON, Romford Road, Manor Park.

Mr. JONES, 2 shops, New Wandsworth.

Mr. TRICK, Green Lanes; Ferme Park, Stroud Green; and 6 Abney Park Terrace.

Mr. TYLER, Victoria Parade, Felixstowe.

Mr. TRUNDLE, Barking Road.

Mr. STARK, Reswick Terrace, Lower Tooting.

Mr. FORBES, Reigate.

Mr. MEACHER, Ferme Park, Finsbury Park.

WOOD & LAYNG, Finsbury Pavement.

FOSTER & CLARKE, Holborn Viaduct.

CLARKE & Co., High St., Camden Town; and at Balls Pond Road.

J. & W. BYGRAVE

DRUGGISTS'

SHOP FITTERS,

AND

GLASS SHOW-CASE MANUFACTURERS,
CURZON STREET, WENLOCK STREET,
NEW NORTH ROAD, LONDON, N.

HOXTON, WORKS: CROPLEY ST., LONDON, N.

NOTICE OUR REASONABLE TERMS.

No charge for packing or fixing, and all measurements of shops will be taken free of charge within 300 miles of London.

NOTICE.—We are the Best and Cheapest by 25 per cent. of any in the Trade.

NOTICE FOR REFERENCES.

WILKINSON & SIMPSON, Newcastle-on-Tyne.

Mr. KAY, Northend, Sale.

Mr. DYER, High Street, Honiton, Devon.

Mr. JOHNSTONE, Newcastle-on-Tyne.

Mr. BOOT, Goose Gate, Nottingham.

Mr. ROBINSON, Allerton Rd., Notts.

SAVAGE & ADAMS, St. James's Street, Brighton.

Mr. HORNE, Douglas, Isle of Man.

Mr. TULLY, West Hill, Hastings.

Mr. COONEY, Greyhound Rd., Falm.

Mr. FELLOWS, Mayfair, W.

Mr. WATSON, High Street, Grays.

Mr. HARRIDGE, Catland Park, Weybridge.

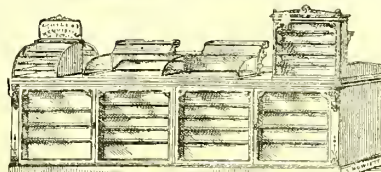
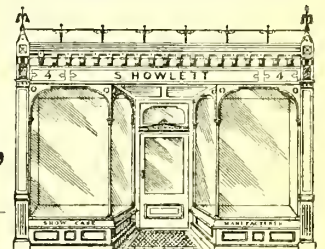
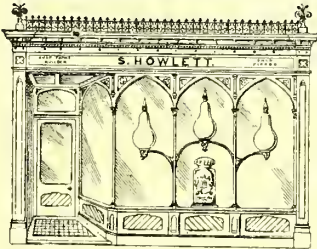
Mr. RUTTER, Allendale Road, Turnham Green.

Mr. SAUNDERS, Orford Road, Walthamstow.

THOMPSON & WALTON, Maidenhead.

ESTABLISHED 1830.

S. HOWLETT,
MEDICAL AND
GENERAL SHOP FITTER,
Shop-Front Builder and Show-Case Maker.



SHOPS FITTED by Contract, in Town or Country, with every requisite, on the most improved principles, and at lowest prices.

NUMEROUS REFERENCES may be obtained of Leading Chemists in all parts of the Kingdom.

A LARGE STOCK of New and Second-hand Fittings and Cases to be sold very CHEAP.

CABINET FITTER to the Pharmaceutical Society of Great Britain.

PLANS AND ESTIMATES SUPPLIED.

Manufactory and Showrooms—4 Lindley St., Sidney St., Mile End Road, LONDON, E.

WHY SELL OBSOLETE GOODS ?

The old styles of Filters were very good in their time, but the discovery of JUDSON'S Filtering Medium, to take the place of the "WORSE THAN USELESS" Charcoal, has entirely put them out of the question for Domestic use.

JUDSON'S FILTERS

AND

FILTERING MEDIUM,

THE ONLY Filtering Medium that **really** Purifies Water, removing Impurities both in **SOLUTION** and Suspension.

Judson's "Galvano-Electric" Filtering Medium is used in all their Filters, and is **WARRANTED** NOT to contain Animal Charcoal or other deleterious matters.

WRITE FOR ILLUSTRATED CATALOGUE.

DANIEL JUDSON & SON, LIM., SOUTHWARK ST., LONDON, S.E.

BETTS & CO. LIMITED

(ESTABLISHED IN 1840),

SOLE MAKERS IN GREAT BRITAIN OF

METALLIC CAPSULES,

AND PATENTEES OF THE

COLOURED SIDE MARK, LABEL, AND OTHER SPECIALITY CAPSULES

(For the Prevention of Fraud and Refilling of Old Labelled Bottles), as supplied to Bass & Co., and the leading Brewers and Bottlers of Wines and Spirits throughout Europe.

PLAIN ORDINARY CAPSULES,

For Small Phials, 2s. 6d. and upwards per 1,000, according to size, style, design, and quantity.

SPECIAL CONTRACTS FOR CONTINUOUS DEALING.

Manufacturers of Pure English-made Bottling and Package Tinfoil, from 1s. per lb. and upwards; Mixed Foil (Foreign Quality), from 6d. per lb. (according to gauge); Patent Barrel Packages and Snuff Canisters, &c.

MANUFACTORIES:—LONDON: Chief Office and Factories, Wharf Road, City Road, E.C.; and Holloway and Patavia Mills, Holloway, N.W.—BIRMINGHAM: Moor Green Fields.—PARIS: Office, 4 Rue Mogador, Chaussée D'Antin.—BORDEAUX: Office, 3 Quai de Chartrons; Factory, Moniépos, Floirac.

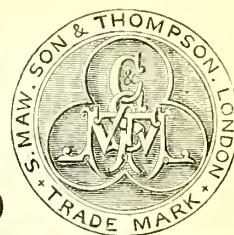
PATENTEES OF HYDRAULIC & MECHANICAL PRESSURE CAPSULING MACHINES,

ESPECIALLY ADAPTED FOR CHEMISTS' COUNTERS.

Largely in use by the Trade, and efficiency guaranteed for all sizes of Bottles, at Royalties from 5s. to £2 2s. per annum.



MAY BE HAD ON APPLICATION,
ENCLOSING BUSINESS CARD,



S. Maw, Son & Thompson's

QUARTERLY PRICE CURRENT

AND

BOOK OF ILLUSTRATIONS

OF

Surgeons' Instruments and Appliances;

INSTRUMENTS, &c., FOR VETERINARY PURPOSES;

Druggists' Apparatus, Implements, Utensils,

And other requisites employed in Pharmacy and the Dispensing of Medicines;

MEDICAL GLASS AND EARTHENWARE; MEDICINE CHESTS;

Shop Fittings and Glass Show-Cases;

LINT AND SPREAD PLASTERS;

Flesh Brushes, Gloves, Rubbers, &c.,

HAIR, TOOTH, AND NAIL BRUSHES;

TOILET AND SMELLING BOTTLES, FEEDING BOTTLES;

Proprietary Articles, Perfumery, and

DRUGGISTS' SUNDRIES OF ALL KINDS.

MANUFACTURED AND SOLD BY

S. MAW, SON & THOMPSON,

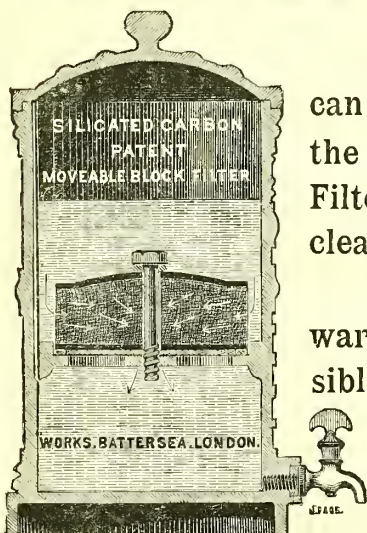
ALDERSGATE STREET, LONDON.

Forwarded, Post Free, to all parts of the World.

SILICATED CARBON

PATENT MOVABLE BLOCK FILTERS.

LIBERAL DISCOUNT TO THE TRADE.



(Section.)

Domestic Filters (as above), in Cream-coloured Stoneware, with Plated Taps and Patent Movable Blocks:—

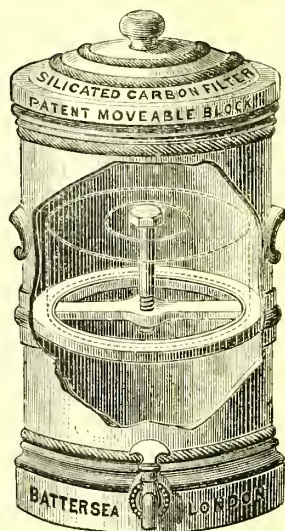
No. 27.	O. $\frac{1}{2}$ gal. 10 6 each.	D. 6 gals. 42/- each.
A. 1 "	14 6 "	E. 8 " 52/- "
B. 2 "	21/- "	F. 12 " 70/- "
C. 4 "	32/- "	

In ordering please state "with patent movable block."

The Silicated Carbon Block can be instantly removed, leaving the whole of the interior of the Filter OPEN for inspection and cleansing.

The working parts are stoneware, and no corrosion is possible.

No loose Pan or inner vessel to cause breakage.



(Elevation with Block removed.)

Dining Room Filters, in Marbled China, with Plated Taps and Patent Movable Blocks:—

No. 22.	A. 2 gals. 35/- each
	B. 5 " 80/- "

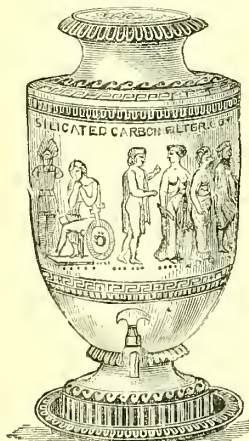
Refrigerative Terra Cotta, do. do. :—

No. 25.	2 gals. 31 6 "
---------	----------------

LIBERAL DISCOUNT TO THE TRADE.

PRIZE FILTER,

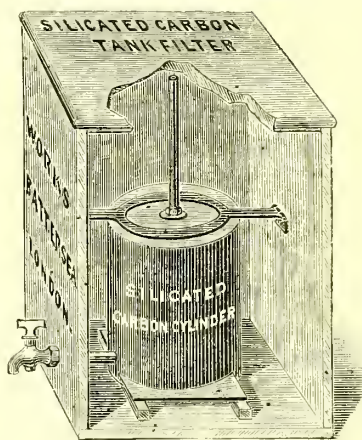
With Patent Movable Block.



No. 23.

Price, with Plated Tap, £3 10s. 0d.

TANK FILTER.



No. 41.

No. A, 10 gallons. £3 3s. 0d. No. B, 20 gallons. £4 4s. 0d. No. C, 40 gallons. £6 6s. 0d. each.

SHIP FILTER.

Wicker Covered, with Patent Movable Block.



No. 26.

(3)

	gallon ..	£	s.	d.	each.
1	"	0	10	6	"
2	"	0	15	0	"
4	"	1	2	0	"
6	"	1	16	0	"
8	"	2	8	0	"
10	"	2	17	6	"
	"	3	8	0	"

FOR FULL ILLUSTRATED LISTS WRITE TO THE

SILICATED CARBON FILTER COMPANY,

CHURCH ROAD, BATTERSEA, LONDON, S.W.

SUPPLEMENT TO "THE CHEMIST AND DRUGGIST."

SATURDAY, MARCH 20, 1886.

i

Hunyadi János

CAUTION.—Circumstances which have come to the knowledge of Andreas Saxlehner, Buda Pest, Sole Proprietor of the Hunyadi János Spring, compel him to WARN the British Public against SPURIOUS IMITATIONS. To secure genuineness, purchasers should see that every bottle has on the LABEL the name of "THE APOLLINARIS COMPANY (LIMITED), London."

TEMPERANCE WINE MIXTURES

For producing delicious Temperance Beverages
in a few minutes.

One Shilling Bottle will make 5 quarts of Cordial.

GINGER, RASPBERRY, STRAWBERRY,
BLACK CURRANT, LEMON, ORANGE, PINEAPPLE,
PEPPERMINT, &c.

Sole Agency given to Chemists in towns not already represented.

Attractively put up in 6d. and 1s. Bottles. Liberal Terms.
Labels and Titles protected. Write for Prices.

YOUNGER & RIDLEY, Bampton, Cumberland.

T. & F. J. TAYLOR'S



AERATED WATERS,
Newport Pagnel.

ESTABLISHED 1835.

**SODA, POTASH, SELTZER, AERATED (without
Alkali), and LITHIA WATERS,
LEMONADE AND GINGER ALE.**

*Each Bottle is protected by a Label bearing the Signature
of the Firm.*

Purity and Excellence of the Water certified by Analysis
by Professor ATTFIELD, Ph.D., F.C.S.

NEW YORK, LONDON, E.C., SYDNEY

SODA WATER MACHINERY

AND ALL ACCESSORIES
FOR THE TRADE

BRATBY & HINCHLIFFE

HEAD OFFICE
SANDFORD ST. ANCOATS, MANCHESTER.

BOXES BOTTLES MACHINERY
ESSENCES
Catalogues, Circulars, Testimonials
Post Free

M. A. CRAVEN & SON, WHOLESALE AND EXPORT CONFECTIONERS,


MAKERS OF

Medicated Lozenges, Refined Liquorice, Jujubes, and every description of Confectionery,
IMPORTERS AND MANUFACTURERS OF LEMON, ORANGE, AND CITRON PEELS.

**EBOR CONFECTIONERY WORKS.
YORK.**

*Lozenges of all descriptions made from Customers' private formulæ (or ingredients), and stamped with
any name or device.*

SPECIALITIES—Cough, Peppermint, Rose, Musk, Bouquet, Cachou, and all kinds of Medicated Lozenges.
ESTABLISHED 1843. PRICE LIST ON APPLICATION.

EVANS, SONS & CO.,  MARK Evans, Lescher & Webb,
LIVERPOOL. LONDON.

EVANS, SONS & MASON, L^D.,
MONTREAL (CANADA).

MANCHESTER OFFICE—
1 & 2 EXCHANGE BUILDINGS, MARKET STREET.

BIRMINGHAM OFFICE—
BARWICK STREET, LIVERY STREET.

WHOLESALE AND EXPORT DRUGGISTS, AND Manufacturing Pharmaceutical Chemists.

Manufacturers of Druggists' Sundries, and Dealers in Patent Medicines and every requirement for Chemists and Druggists.

Prices Current of Drugs and Chemicals and Druggists' Sundries (Illustrated) supplied on application, enclosing Business Card.

ILLUSTRATED EXPORT LISTS

(About 200 pages each), containing Prices of Drugs, Chemicals, Pharmaceutical Preparations, Druggists' Sundries, Surgical Instruments and Patent Medicines, &c., are sent post free to any part of the world on application (ENGLISH in January and July, SPANISH in April and October).

The above Lists offer Unusual Advantages as a Medium for Advertisements.

Makers of Proprietary Medicines, Perfumers, &c., by advertising in same, will have their specialities brought prominently under the notice of dealers in all parts of the World. Terms for advertising (which are strictly moderate) may be obtained by applying to Messrs. EVANS, SONS & Co., 56 Hanover Street, Liverpool. All Advertisements translated into Spanish free of charge.

SOLE PROPRIETORS OF



TRADE MARK

SAVARS SPECIALITIES,

Every Description of Household Requisites, Toilet Requisites, Medical Requisites, Druggists' Requisites.

HAWLEY'S COUNTER ADJUNCTS.

A Special List, "COUNTER ADJUNCTS," sent on Application.

EVANS' FLUID EXTRACTS.

Of guaranteed quality and representing the whole medicinal properties of the Drugs.

EVANS' CONCENTRATED LIQUORS,

For the extemporaneous preparation of Syrups.

EVANS' SALINE.

The proportions of the various ingredients are carefully and judiciously calculated, so as to form an efficient aperient and alterative, as well as an agreeable and effervescent draught. ALSO

FOSSILINE (WHITE AND YELLOW)

A Bland, Odourless, and perfectly pure Hydro-Carbon Jelly of our own manufacture. Cheapest and best Hydro-Carbon.

ALSO

" MONTSERRAT "

LIME-FRUIT JUICE AND CORDIALS.

Largest Sale of any similar Beverage in the World.

180,000 Gallons Imported annually. Received Awards wherever Exhibited.

Agents for United States: WRIGHT & RICH, New York, Boston, Baltimore, and Chicago.

Advertisements in this issue are paged; announcements appearing on alternate weeks or at other intervals have not the page indicated.

Telephone Number,
1852.

INDEX TO ADVERTISEMENTS.

Telegraphic Address—
CHEMDRUG LONDON.

HEAD OFFICE: 42 CANNON STREET, LONDON, E.C.

TARIFF FOR DISPLAYED ADVERTISEMENTS.

To secure the Series Rates, Orders must be given in advance.	1 Insertion, net	4 Insertions, each net	7 Insertions, each net	13 Insertions, each net	27 Insertions, each net	53 Insertions, each net
One Page	£7 10 0	£5 0 0	£4 10 0	£4 0 0	£3 15 0	£3 10 0
Half "	4 2 6	2 15 0	2 9 6	2 4 0	2 0 0	1 17 6
Quarter "	2 8 0	1 12 0	1 9 0	1 5 6	1 2 6	1 0 0
Eighth "	1 7 0	0 18 0	0 16 3	0 14 6	0 13 6	0 12 6

Advertisers are requested to note that the DIARY forms one part of the year's publications, and that one insertion of every series in force in October of any year will be published in the DIARY as a matter of course, and will be charged for at the series rate.

THE PROPRIETORS DO NOT VARY THEIR QUOTED TERMS UNDER ANY CIRCUMSTANCES.

Please note that to satisfy Post Office requirements the Advertisements are paged twice—once in Arabic, once in Roman numerals.

A		BUCK, F. Lessons in Dentistry
A1 BR ND MENTHOL CONES		BULLOCK, J. L., & CO. Peppine
ESCUA A BITTER WATER		BURGESS, E. Lion Ointment and Pills
AIRE AND CALDER BOTTLE CO.		BURGESS, WILLOWS & FRINGS Wholesale Druggists
ALLEN & HANBURY'S Bottles and Sundries 21		BURGOYNE, BURBIDGES & CO. Wholesale
ANTONINUS PILS Apothecary & Export Druggists. COVER		BURROUGHS, J. Spirit, Pure and Methylated
APOLLINARIS CO. Apollinaris Water, Hungary Janos Water, 1		BURROUGHS, WELLCOME CO. Symplicanthus ix
Friedrich's Salt Water. TEXT 202		BUSH, W., SON, & CO. Marigoldine, Chemicals
ARUNDEL & MARSHALL, Folding Card Boxes		BUSH, W. J., & CO. Essential Oils, Soluble Essences, French Cream
ASHWORTH BROS. Metallic Comb-brushes		BUSINESSSES FOR DISPOSAL
ASSISTANTS WANTING SITUATIONS. 2		BUTLER, MCCULLOUGH & CO. Herbalists, Leeches, Waters
ATKINSON & BARKER. Infants' Preservative		BYGRAVE, J. & W. Shop Fitter 11
AUSTIN & CO. Cardboard Boxes and Perfume Sprinklers, &c.		
AYRTON & SAUNDERS. "Silver" Comb		C
and Menthol Cones, Various Boxes		CADBURY BROS. Cocoa Essence COVER
B		CALVERT, F. C., & CO. Carbolic Powder, Soluble Cresol viii
BAILEY, W. H., & SON. Trusses, Bandages, &c.		CAMPBELL & CO. Caution Chemicals 26
BAILY, J. A Physician's Pharmacopoeia 5		CENTRAL SCHOOL OF CHEMISTRY AND
BAISS BROS. & CO. Wholesale Druggists xii		PHARMACY
BANKS & RATCLIFFE. Boxes, Staves, and Oak Heads		CETTI, E. Scientific Apparatus
BARBER, G., & CO. Crinoline Marking Ink		CHAVE & JACKSON. Cyanine
BARBER. Concentrated Liquid Cocaine		CHEMISTS' AERATED WATERS ASSOCIATION
BARCLAY & SONS. Chocolate Rousseau, Patent Medicines		CHESEBROUGH MANUFACTURING CO.
BARKER, W., & SON. Engravers		CHEVALIER & CO. Medicine Perles (Capules)
BARNES, J. B. Impermeable Carriage Paint 25		CHESWICK SOAP CO. Soft Soap
BARNETT & FOSTER. Machinery, Syphons,		CHRISTIAN, H. J. (H. BOND)
BARRON, SQUIRE & CO. Manufacturing Pharmacists		Oak Tree Marking Ink
BARTON BROS. Dentifricium		CHRISTY, T., & CO.
BATES, F. W. Frizzetta 8		CHUBB, J. C., & CO. Menthol Cones, Specialties xx
BATTLE, J. R. Vermin Killer		CLARKE, S. Seidlitz, Violet, Fuller's Earth Powders
BAUMGARTNER & CO. Brilliantine Polishing Powder		"CIBILS" Fluid Beef Extract
BEDDARD, J. Belgavia Tooth Paste		CLARKE, BLEASDALE & CO. Pearl-coated Pills
BEECHAM, T. Pills		CLARKE, JOHN T. Indiarubber Stamps and Marking Ink
BEESELEY & SONS Liebig's Iodized Cod Liver Oil		CHUBB, J. C., & CO. Nursery Lamp Food Warmers 16
BENNETTE & CO. Mamma Cake		CLAY, DODD & CO. Wholesale Druggists, Liverpool
BENTLEY, E., & SONS. Optic Glass Pots		COCKING & CO. Japan Agents, Peppermint Oil, Menthol xvii
BENTLEY, E., & SONS. Medicine Chests, &c.		COCKING, T. S. Pill Machines
BERNSTEIN & VOGHT, Chloroform & Chemicals		COLWELL, H. M. Trusses 22
BETHELL THOS. Parcel Post Boxes (Patent)		CONDON, R. Flesh Brushes
BETTS & CO. Metallic Capsules 12		CORNER, R. Devonshire Oils and Embrocations
BEWLEY & DRAPE. Dechloride Ink		CRAYEN, M. A., & SON. Confectionery, Lozenges i
BIEBER, J. D. Santonine, Drugs, Hamburg		CRAWSHAW, E., & CO. Crystal Dyes
BIRKBECK BANK. Bank and Building Society		CRESSWELL & CO. Sponges
BLAKE & MACKENZIE. Printing		CRITCHLEY, T. Starch Gloss
BLYTON, T. BAGE & CO. Medicated Lozenges xx		CROSSLEY BROS. "Otto" Gas Engines
BOCK, OSCAR, SEN. Artificial Eyes		CUBLEY & PRESTON. Nitrometers 9
BOEHM, GUS. Soap, Perf., & Medical Charms		CURTIS & SON. Shop Fitters 10
BOLE HALL MILL. Surgical Bandages		
BOND'S DAUGHTER. Crystal Polace Marking Ink		D
BOURNE, F. J. LATHIER		DALES, J. T. Dublin
BOWDEN, F. H. (Henry's Great In An Remedies)		DARKE, EDWARD. Pure Vaccine Lymph
BOWERS BROS. Chemists' Printers xx		DARLING W., & CO. Coffin's Dentifrice
BOWLING & GOVIER. Shop Fitters 11		DARTON, F., & CO.
BRADCH & CO. Desideratum "M" Mixing Machines		DAVENPORT, J. T. Chloroquine
BRADLEY & BOURDAS. Pate Powder		DAVIS, M., & CO. Filters, Flytrap Vials, &c.
BRAMWELL & SON. Cream Caustic Soda and Epsom Salts		DAVISON, A. Foreign Agent
BRAND & CO. Invalids' Foods		DAY, SON & HEWITT
BRATHY & HENCHIFFE. Soda Water Plant		DAY & RAISEBECK. Veterinary Medicine Chests vi
BREFFITS, E., & CO. (LIMITED). Bottles and Sundries 21		DE LUCA, G. V. Steel Polish
BREHMER, AUG. Folding Cardboard Boxes		DAY & RAISEBECK. Screw Pots and Bottles, Tuscan Olive Oil
BREIDENBACH & CO. Smelling Salts		DENOVAL, J. Medicinal Capsules
BRETT, F. L., & CO. Soap for An at		DE PASS, E. A., & CO. Vegetable Liver Pills xiv
BRISTOL & WEST OF ENGLAND SUPPLY. Homoeopathic Medicines		DE ST. DALMAS, A.
BRITISH COLLEGE OF HEALTH. Morison's Pills		DIGESTINE CO. Diastine
BRITISH SYPHON CO. Syphons, Gazoogens		DINNEFORD & CO. Fluid Magnesia
BROOKE, BOND, & CO. Peas 7		DOBELL, DR. Ducks
BROOKS, PEEL & CO. Collapsible Tubes, Surincker Stoppers		DODD & CO. Liver Pills
BROOKS, T. How a Chemist made a Fortune		DOUTON & CO. Filters
BRUNNER, MOORE & CO. Bicarb. of Soda and Pure Alkali		DRYSDALE, J. W., & CO. Chemical, Foreign Agencies
		DUKAS & CO. Brushes 8
		DUNCAN, FLOCKHART & CO. Chloroform, Ink, &c. xviii
		DUNDAS, DICK, & CO. Menholine and Menho'tette
		DUNN & CO. Acetic Acid and Chemicals—Fire
		DURRANT, GEORGE, & CO. Orange Wine and Mineral Waters
		E
		EDINBURGH CLASSES. School of Pharmacy
		EDWARDS & SONS. Patent Medicines
		EDWARDS, E. M., & SON. Tea Dealers
		EDWARDS. PATENT AERATED WATER
		BOTTLES (BREFFITS, LIMITED). 21
		EISNER & MENDELSSOHN. American Herbs
		ELLIS, R., & SON. Ruthin Aerated Waters
		EMPLOYERS WANTING ASSISTANTS. vi
		EPPS, J., & CO. Homoeopathic Medicines
		ESCHMANN BROS. & WALSH. Silk Catheters 24
		ESTES, E. B., & SONS. Turned Wood Boxes
		EVANS, LESCIEUR & WEBB. Wholesale and Export Druggists, London ii
		EVANS, SONS & CO. Shop Fitters, —Chemists
		Abroad, ii—Feeding Bottles, —Druggists
		Sundries and Savars Specialties, ii —Porous
		Posters on Felt —Montserrat Lime Juice. ii
		EWEN, J., & SONS. Clarified Lord
		EXCHANGE COLUMN. 4, 5
		F
		FARINA, J. M. "Gegenüber"—Eau de Cologne
		FARINA, J. M., No. 4. Eau de Cologne
		FELTON, H. Soda Water Machinery
		FELTOS & SONS. Lime Juice 26
		FELTON, GRIMWADE & CO. Druggists, Melbourne xvi
		FENNINGS, A. Children's Powders COVER
		FENCH, RICKMAN & CO. Mustard
		FINK & CO. Glycerine, Gums, &c.
		FINKLER & CO. Vegetable Peppine
		FITCH & NOTTINGHAM. Leeches
		F. J. M. Commission Agency—Abroad
		FLETCHER, FLETCHER & STEVENSON. De Fry's Liquid Cinchona
		FOLLOWS & BATE. Druggists' Machinery, all kinds 9
		FORD, SHAPLAND & CO. Printing
		FOUGHER, F. F. Royal Pills for Poultry
		FOUGHER, E., & CO. New York Agency
		FOULKES, W. J. Cement, Toilet Powder
		FREEMAN, R. Chloroquine
		FRIEDRICHSHALL. Aperient Mineral Water
		FRY, J. S., & SONS. Malted Cocoa and Cocoa Extract
		G
		GALLAIS, E., & CO. Mineral Waters
		GALZY, E. Insecticide
		GASKELL, DEACON & CO. Bicarbonate of Soda
		GEOLINE MANUFACTURING COMPANY. Petroleum Jelly 17
		GEORGE & WELCH. Dandelion Coffee, &c.
		GERARD, A. Brushes and Toilet Specialties
		GIBB, SMITH & CO. J. Spirits of Wine
		GIBBS, CUNOX & CO. Surgical Dress and, &c.
		GIBSON, R. Lozenges, Sugar, &c.
		GILBERT, W. Homoeopathic Pills & Tinctures
		GILLOTT, J. Pens
		GOODALL, BACKHOUSE & CO. Yorkshire Relish, Canton viii
		GOULD, E., & SON. Homoeopathic Medicines and Sundries vii
		GREAT TOWER STREET TEA CO. Celebrated London Teas
		GREEN, F., & CO. Cattle, &c., Specie, Drug
		GRINDLEY & CO. Crushed Linseed 26
		GUERET FRERES. Petroleum Jelly
		Syphons, Seltzogenes, Soda Water Plant
		H
		HALLER & CO. Lanoline ix
		HARDEN & CO. Bath-han Toothache Cure
		HARKER, STAGG & MOSS. Manufacturing Pharmacists 17
		HARRIS, P., & SON. Oxide of Zinc
		HARRISON, F. J., & CO. (LIM.). Hydrochloric
		HARRISON, W. B. Acid, Mineral Waters
		HARROP. Lucan Glaze
		HARPSON, A., & CO. Ginger Ale
		HARVEY & CO. Methylated Spirit

HASSALL, THOMAS.....	Buy Salt	
HASSALL & CO.....	Phospho-Citric Acid	
HAY, W.....	Schleide Ess. Lemons, Ess. Ginger	
HAYWARD TYLER & CO.....	Steam Engine	
HAYWOOD, J. S.....	Surgical Appliances	18
HEARN, RIDDELL & CO.....	Feeding and other Bottles	
HEARON, SQUIRE & FRANCIS.....	Manufacturing Pharmacists	Text 202
HENRY.....	Magnesia	
HERRINGS & CO.....	"Herring's Unguentum Paraffinum"	
HEWLETT, C. J., & SON.....	Liq. Santal, Flav., &c., Mist. Pepsin, Co.	
HOCKIN, WILSON & CO.....	Mouth Cones, Toothache Pencils, &c.	
HOLLOWAY, PROFESSOR.....	Pills and Ointment	3
HOLT, ALFRED, & CO.....	Drugs, Chemicals, and General Produce	
HOMOPATHIC NURSING INSTITUTE.....	Price Essay on	5
HOMOPATHY.....	Water Bed	3
HOOPER & CO.....	Compressed Salts and Drugs	
HOP BITTERS.....	Caution and Guarantee	
HORMUSJEE, RUTTONJEE & CO.....	Bombay, Chemists	
HORN & SON.....	Patent and Trade Mark Acents	26
HORSFORD'S ACID PHOSPHATES.....	Acids	xix
HOSKIN, W.....	Tea and Kaff Sugar	
HOUGHTON.....	Refinery	
HOVENDEY & SONS.....	Lloyd's Excise	
HOWARDS & SONS.....	Quinine and Pharmaceutical Chemicals	xiii
HOWEY, L.....	Golden Herb Pills	
HOWLETT, S.....	Shop Filter	11
HUGO, BROWN, & CO.....	Effect of Beef	
HUNTER SISTER CO.....	Sifters, Mixers	
HINYARD JANOES.....		1
HUTCHINSON, A., & CO.....	Manufacturers of India Rubber Goods	24
HYNAM, J.....	Fallers' Bath	
IDRIS & CO.....	Pure Mineral Waters	
IMMISCH, M.....	Metallic Thermometers	22
INDEX.....		iii, iv
INDIA TEA GROWERS' ASSOCIATION TRADING & ROYAL NATURAL MINERAL WATERS COVER INGRAM & SON.....	Excises	
JACKSON, M., & CO. (ORME & CO.).....	Scientific Apparatus	
JAKSON, JOHN, & CO.....	Peppermint, Lavender Oils, &c.	xiv
JAMES & CO.....	Hair Preparations	8
JAMES & CO.....	Cure for Scasichens	
JAMES, LIEUT.....	Horse Blisters	
JAMES, PROSSER, M.D. Guide to the New B.P. JAMES, R. J.....	Horse Blisters	4
JENSEN, DR. CARL L.....	Pentones and Crystal Pepsine	15
JEWSBURY & BROWN.....	Tooth Paste 22, Astringent Waters	
JOHNSON, J. H., & S. J.....	Essential Oil Mustard	
JONES & MASON.....	Methylated Spirit	26
JONES, DR. G. H.....	New Pamphlet	
JUDSON & SON.....	Filtering Medium and Glass 10, 12	
Filters, Dyes, and Gold Paints.....		7
KANGRA VALLEY.....	Tea	
KAY BROS.....	Fresh Fruit Essences, Cement and Specialties	
KEARSLY.....	Widow Welch's Female Pills	
KEENE & ASHWEEL.....	Homoeopathic Medicines	
KEITH, B., & CO.....	American Concentrated Medicines	xviii
KEMP, W., & SON.....	Crushed Linseed	3
KEMPTHORNE, FRANK.....	Druggists in New Zealand	xvii
KETTLE, F. G.....	Vegetable Parchment	
KILNER BROS.....	Feeding and Dispensing Bottles	19
KIMPTON, H.....	Books, discount	
KING, ALFRED, & CO.....	King's Hop Bitters	
KINSMOND'S MINERAL WATERS.....	Peripartum	
KUHN, B.....		
LA BOITREBOULE.....	Mineral Water	
LALRITZ.....	Fine Wool Productions	xviii
LALOR, DR.....	Phosphodyne	xv
LAMB & WATT.....	Orange Vine	
LANCASTER & SON.....	Photographic Apparatus	6
LANG, J., & J.....	Feeders, Bottles, Siphons	20
LANGTON, EDWIN, HICKS, & CLARK.....	Wholesale and Export Druggists	
LAZENBY, E., & SON.....	Harvey's Sauce	
LEAHODY, E. B.....	Compound Glycine Linctus	
LEATH & ROSS.....	Homoeopathic Medicines, Wholesale	
LEMATRE & CO.....	Shop Filter	
LENNON, B. G., & CO.....	Druggists, Cape Colony	xix
LEOS' TABLETS.....	Compressed Chlorate of Potash	
LEVERMORE, AUG., & CO.....	Pure Precipitated Chalk	26
LIEBIG CO.....	Extract of Meat	
LINCOLN AND MIDLAND COUNTIES DRUG CO.....	Clarke's Blood Mixture	
LINDNER, M.....	Rubber Stamps	28
LINDSEY & SONS.....	Trusses and Elastic Goods	16
LIVERPOOL PATENT LINT CO.....	Lint	23
LIVERPOOL SCHOOL OF PHARMACY.....	School	
LLOYD, A. S.....	Excises	
LONDON HOMEOPATHIC HOSPITAL AND MEDICAL SCHOOL.....		5
LONDON MANUFACTURING CO.....	Essence of Beef	
LORIMER & CO.....	Lime Juice Cordial	
LYNCH & CO.....	Lozenges, COVER	
MACFARLANE, J. F., & CO.....	Morphia, Chloroform, &c.	ix
MACNATR & CO.....	Spirits, Pure and Methylated	
MACNAUGHTON.....		3
MAIGNEN, P. A.....	Filters—"Anti-Calcaire" Powder	

MANCHESTER SCHOOL.....	School of Pharmacy	
MANSON & SCHRAMM.....	Glass and Surgical Instruments	
MARTIN, J. W., & CO.....	Perfumery	3
MARTINDALE, W. H.....	Hypodermic Lances or Discs	25
MASON, G., & CO.....	Essence of Beef	
MASON, HENRY, & CO.....	Waxed & Satin Paper	8
MATTHEWS, W.....	Plasters	
MATTHEWS RUBBER CO., THIE, SPRINGES, &c. xiv		
MAW, S., SON & THOMPSON.....	Lozenges	
MAWSON & SWAN.....	Quartry Price Current	13
MAY & BAKER.....	Pharmaceutical Chemicals	
Camphor, Tablets, Mercaptans, Ethers, Bismuth, &c.		COVER
MAY, ROBERTS & CO.....	Seltogenes and Water Bath	xi
MEADOWCROFT, W.....	Essences, &c.	
MEINERTZLAGEN & CO.....	Butter Colour, Remet	
MEYER & HENCKEL.....	Butter Colour, Remet	
MILLS, R. M., & CO.....	Bourne Aerated Waters	
MISCELLANEOUS ADVERTISEMENTS.....		
MONTSERAT.....		ii
MOORE, A. Y., & H.....	Essences, &c.	
MORGAN CRUCIBLE CO.....	Crucibles, Porous Pots, &c.	26
MORRIS, S.....	Stomach Drops	
MORRIS & CALLARD.....	Acetic Acid, Naphtha, &c.	
MORRISON'S PILLS.....		
MORRISON, R., & CO. Drug, Oil, & Chemicals		
MOUSON & CO.....	Cocoa Butter Soap	
MUMBY.....	Aerated Waters	
MUMFORD, G. S.....	London, Stare	
MUNDAY, J.....	Fallers' Bath	TEXT
MURPHY, J.....	"Injection Day"	
MURRAY, SIR JAS.....	Marking Ink	7
Fluid Magnesia, Fluid Camphor		xii
NESTLE, H.....	Milk Food for Infants	
NEWBERRY, F., & SON.....	Catalogue	v
NEW CAROLINE SANITARY CO. (LIM.).....	Chloride of Lime in packages	
NEWSOME, C.....	Surgeons' Lint	23
NEWTON & CO.....	Photographic Apparatus and Chemicals	
NEWTON, ROBINSON, CO.....	Acetylene	25
NICHOLSON, W. O., F.C.S. Analytical Chemist		
NOAKES, B., & CO.....	Metallic Casks, Drums, Kegs, Canteens, Bores, &c.	9
OAKLEY & SONS.....	Polishing Preparations	
OPPENHEIMER & CO. Manufacturing Chemists		xv
ORME, J., & CO.....	Scientific Apparatus	
ORRIDGE & CO.....	Transfer Agents	2
OSBORNE, BAKER & CHESMAN.....	Ye Old Scents and Ruby Lip Salve	
PATENT PLUMBAGO CRUCIBLE CO.....	Court Plaster	26
PATERSON, A.....	Lint, Plaster	
PEACE, A. R.....	Pitch, Oils, &c.	9
PEARS, A. & F.....	Transparent Soaps	
PEARSE & WHITLEY Tea and Coffee Dealers		
PETERSON & CO.....	Sponge	3
PHILLIPS & CO. (LIM.).....	General Merchants	
PICKERING, J., & SONS.....	Rectified Spirits	
PICKERING, J., & SONS.....	Needham's Polishing Paste	
POCOCK BROS.....	Tabular Water Beds	24
POTTER, H., & CO.....	Shop Bottles and Jars	20
POTTER & CLARE.....	Bolonic Druggists	
POWELL & BARSTOW.....	Elastic Gum Surgical Instruments	22
PRICE'S PATENT CANDLE CO. (LIM.).....	Glycerine	
PRONK, DAVIS, & CO.....	Varnish Materials	
PROSSER, E., & CO.....	Druggists, Sydney	xvi
QUILLIAM, JOHN, & CO.....	Homoeopathic Medicines and Plasters	
RABE & KUNTZE.....	Gum Eban	3
RACKHAM & CO.....	Dog Medicines	
RAMES & CO.....	Essence of Composition Powder	
RANDALL & SON.....	Black Currant Lozenges	
REED & CO.....	Wholesale Druggists, South Africa	xvii
RESTUCCIA, GIOV., & CO.....	Essential Oils	
RICHARDS, JOHN M.....	Home and Foreign Proprietary Articles	
RICHARDS, CHAS.....	Patent Tube Cleaner	
RICHARD, E. M.....	India Rubber Stamps	26
RIDGE, DR.....	Food	
RIMMEL, E.....	Perfumery Toilet Preparations	
ROBINSON & SONS.....	Methylene, &c.	xx
ROBERTS & CO.....	Foreign Patent Medicines	
ROBINSON & SON.....	Insect Powder Boxes and Bellows	
ROBINSON & SONS.....	Lint, Absorbent Wool, &c.	23
ROBINSON, B.....	Orange Wine, Conc. Waters	
ROCKE, TOMPSITT & CO.....	Druggists, Melbourne	xvi
ROGERS, W.....	Hair Lotion	
ROSENTHAL & CO.....	Rice Starch	26
ROSS & CO.....	Vinum Auranti	
ROTHMANN, L.....	Mathew's Fallers Earth	8
ROUSE & CO.....	Chloride of Gold	
ROWLAND, L.....	Toilet Articles	
ROYAL & SONS.....	Royal Perfumery Co. Edgewood Perfumes	
ROYAL PERFUMERY CO. Edgewood Perfumes		
RUMFORD CHEMICAL CO.....	Horsford's Acid Phosphates	xix
RYLANDS, DAN.....	Mineral Water Specialties and Machinery	
SANITARY PAPER CO.....	Sanitary Paper (LIM.)	
SANITAS CO. (LIM.).....	Disinfectant	TEXT
SAINSBURY, S.....	Lavender Water	26
SANFORD & SON.....	Verminal Killer	
SANGER, J., & SON.....	Patent Medicines, Price Current	
SAUNDERS, CHARLES Paraffinum Mille P.B.		
SAVARS SPECIALITIES.....	The Lamella of the	
SAVORY & MOORE.....	Pharmacopoeia, Pancreatic Emulsion, Peptonised Milk, &c.	

SAVORY & MOORE.....	Peptonising Pellets	
"....."	Food for Infants	
"....."	Meat Peptone	
SCHACHT, WILLIAM, & CO.....	Kronenquelle	
SCHOOL OF PHARM. (Bloomsbury Sq.).....	School	
SCHWENKNER, E., & CO.....	Frozen Filtering Papers	
SCHWEPPE'S MINERAL WATERS.....	Ginger Ale, &c., TEXT	
SCOTT, J., & CO.....	Respirators, Opticians	ix
SCOTT, W. A.....	Surgical Instruments, &c.	27
SEABURY & JOHNSON.....	"Still they come"	
SEEGE, H.....	Metal Cleaning Potassium	
SEELY.....	Hard Rubber Trusses	
SELF-OPENING TIN BOX CO.....	Tin Boxes	
SHARLAND & CO.....	Wholesale Druggists	26
SHIRLEY, & J.....	Wholesale Druggists	vi
SHIRLEY.....	41 Mouth Cones	
SILKREFFS & CO.....	Foreign Chemists	26
SILICATED CARBON FILTER CO.....	Filters	14
SIMCOCK, J. S. Feeding Bottles (Screw Stoppered)		18
SIMCOCK, T. W.....	Druggists' Sundries, Paraffin, Benzoline, &c.	
SMITH, T. J.....	Cod Liver Oil	
SMITH, J. G.....	"Mineral Water Makers' Manual"	
SMITH, T., & H., & CO.....	Morphia, Chloroform, &c.	ix
SMITH, W. F.....	Antibiotics, Pills	
SMITH, W. F.....	Fowler's Corn Plaster	
SOUTHALL BROTHERS & BARCLAY.....	"The	x
SOUTH LONDON SCHOOL OF PHARMACY.....	School	5
SPINNER & SON.....	Spinner's Teas	
SPONGE & SON.....	Pip Powders	
SPRATTS PATENT.....	Dog Biscuits & Medicines	25
ST. JACOBS OIL.....	Drug Levigators	
STATON & COOPER.....	Non-Secret Medicines	
STEARN, FREDK., & CO. Non-Secret Medicines		
STEEDMAN, J. H.....	Teething and Sedatives	
STEPHENSON & TRAVERS.....	(Styptic) Antiseptic Dressing	
STEVENSON, P. A.....	White Guttapercha	
STEVENSON & HOWELL.....	Essential Oils, &c.	
STOCKER'S FEEDING BOTTLES (BREF-FITS, LIMITED).....	Toilet Specialties	8
STURROCK & SONS.....	Chromo Thermal Composition Essence	
SUTTON, F., & CO.....	Instruments and Chemicals	
SUTTON, O., & CO.....	Tooth Blocks (Dentifrice)	
SYMES & CO. (Sima).....	Musk and Agencies	xviii
SYMINGTON, THOS., & CO.....	Coffee Essences	
SYMONDS & CO.....	Cigars	
TAYLOR, E.....	Plasters	23
TAYLOR, T., & F. J.....	Aerated Waters	1
TAYLOR, T.....	Cleaning Drinks	
THE LONDON RUBBER PRINTING CO.....	Rubber Stamps	26
THOMAS, F., & CO.....	Quinine, &c.	
THOMPSON & CAPPER.....	Homoeopathic Medicines and Dentifrice Water	vii
THOMPSON, H. ASQUUGH, & SON.....	Wholesale and Export Druggists	
THOMPSON & NORRIS MANUFACTURING COMPANY, LIM.....	Corrugated Paper	
THOMPSON, MILLARD & CO. (LIM.).....	Druggists' Sundries	
TITERTON & HOWARD.....	Brushes	
TODD, ALBERT M.....	Pimenthol Crystals	xix
TOHLINSON, R., & SONS.....	Shop Filters	10
TOOGOOD.....	Egyptian Lophors	x
TOOGOOD, W.....	Earthenware Covered Pots and Feeding Bottles	
TOWLE, A. P.....	Paraffin's Toilet Cream and Chlorodyne	
TOWNSEND, J.....	Handbills and Labels	9
TREBLE, GEO., & SON.....	Shop Filters	11
TULLY.....	Postal Teaching	5
TYLER, HAYWARD, & CO.....	Steam Engine	
TYRER, P.....	Ketchup and Sauces	3
VALLAT, L.....	Patent Stoppered Bottles	
VAN ABBOTT.....	Diabetes Foods	
VOGELER CO., THE CHARLES A.....	St. Jacobs Oil	25
WAITE & BATMAN.....	Transfer Agent	
WALKER & DALRYMPLE.....	Tea	
WALKER, TROKE & CO. Change of Partnership		
WARNER, W. R., & CO.....	Capsuled Horse and Dog Balls	
WAIT, J. J., & CO.....	Coated Pills and Ingubins	
WEST, THOMAS.....	Homoeopathic Medicines	
WESTMINSTER COLLEGE OF CHEMISTRY AND PHARMACY.....	School	
WHITTAKER & GROSSMITH.....	Saltpetre Oil Soap	
WHITE, GEO., & SONS Irish Whisky and Licentiate		
WHITFIELD & CO.....	Dispensary, &c., Bottles	xx
WILCOCKS, N. G.....	Soda Water Machinery	
WILSON & SON.....	Urinary Test Papers	
WINK, J. A., & CO.....	Morphia and all its Salts	
WOLTERS, OTTO.....	Balances	
WOODS, M. W.....	Area Tooth Paste	
WOOLLEY, SONS & CO.....	Drug Millers	
WRIGHT, J. H. Poultry Eggs Producing Food		
WRIGHT, LAMAR & UMMY.....	Wholesale and Export Druggists	COVER
WYLEYS & CO.....	Essential Oil of Abundons	viii
Coated Pills, Pharmacuticals, Wholesale Druggists		xi
YARDLEY & CO.....	Choice Toilet Soaps	26
YATES, W. S.....	Shop Filter	xviii
YORK GLASS CO. LIM. Pat. Bottle Lettering		
YOUNGER & RIDLEY.....	Temperance Wine Mixtures	1
YOUNG, H. (G. Pattison, propr.).....	Corn Plasters	9
ZIMMERMANN, A. & M.....	Schering's and Fouselberg's Chemicals—Jodiform, Paratichyde...	

NEWBERRY'S

(430 Pages of Information in the 1886 Edition, now ready.)

CATALOGUE.

IT WILL PAY YOU

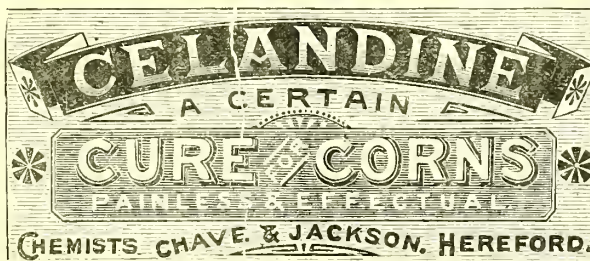
to take this Agency, because you can sell ten times more CELANDINE than any other "CORN CURE," without trouble or expense.

See opinions of 500 Chemists who have proved it

CELANDINE is the best and most saleable article in the Market.

WRITE FOR
PARTICULARS,
LIBERAL TERMS,
AND AGENCY.

Trade Mark, 31648.



WRITE FOR
PARTICULARS,
LIBERAL TERMS,
AND AGENCY.

Retail at 1/ and 2/6.

CELANDINE is attractively Wrapped in Colours. Well Advertised. Known all over the World. In greater demand than any other remedy for Corns. Acknowledges no equal or imitation. Gains recommendation of all buyers.

Great advantages offered to pushing Agents, whose interests are protected. A large and profitable trade can be done without risk, competition, or outlay. Satisfaction guaranteed.

ATTRACTIVE HANDBILLS, PAMPHLETS, &c., WITH AGENT'S NAME, SHOW CARDS, POSTERS, TESTIMONIALS, &c., ON APPLICATION.

AN ARTISTIC SHOW CARD IN EIGHT COLOURS.

Mr. DAVID GILMOUR, Chemist, Dunfermline, writes:—"It is just a year since I sent the first order for a modest 3 dozen Celandine. Have now sold over 500 bottles, and gained the recommendation of many customers. Its imitations are one by one falling away."

INFRINGEMENTS will be prosecuted. We have obtained Injunctions, Costs, and Apology against the proprietors of spurious imitations called CELANITE and CELESTINE (see decision of Mr. Justice Kay, Chancery Division, High Court of Justice).

ENGLISH AND FOREIGN AGENTS WANTED. CORRESPONDENCE SOLICITED.

CHAVE & JACKSON, HEREFORD.

Telegraphic Address—
"CELANDINE HEREFORD."

JAMES EPPS & CO.'S

(FIRST ESTABLISHED)

HOMOEOPATHIC MEDICINES

Are supplied direct or through the PATENT MEDICINE HOUSES.

Small quantities are conveniently sent by PARCEL POST.

FOR ILLUSTRATED GUIDE AND PRICES APPLY TO

48 THREADNEEDLE STREET.**ALEXANDER & JOHN SHAW,****GRANTHAM, ENGLAND,**

MANUFACTURERS OF THE WELL-KNOWN

CHAMOIS LEATHER,**PLASTER SKINS, AND WHITE SPLITS FOR PERFUMERY CAPPING.***These Goods are of the choicest quality, and specially prepared for the Drug Trade.***HORSE, CATTLE, AND SHEEP MEDICINES**

BY ROYAL APPOINTMENT.

By Special Warrant,
Dated 27th December, 1865.**DAY, SON & HEWITT,**

INVENTORS AND SOLE PROPRIETORS OF THE

By Special Warrant,
Dated 10th February, 1866.**"ORIGINAL" STOCK BREEDERS' MEDICINE CHESTS.**

Containing the following Matchless Remedies for all Disorders in Horses, Cattle, Calves, Sheep, & Lambs:

THE CHEMICAL EXTRACT.For assuaging pain and inflammation in all wounds, saddle galls, strains, bruises, and swellings in horses; for paining after calving and lambing, and for swollen udders and sore feet. $\frac{1}{4}$ -doz. box, 7s. 6d.**THE RED DRENCH**

Celebrated for inflammatory disorders; such as fevers, pleurisy, foot-and-mouth complaint, yellows, surfeit, and red water. Also for difficult calving and lambing. 3s. 6d. and 13s. per dozen box.

THE GASEOUS FLUID.

Unmatched for colic or gripes and debility in horses, for colds, chills, shivering fits, and diarrhoea in cattle, calves, and sheep. 20s. per dozen box.

THE CARMINATIVE CHALK.A warm stomachic in severe diarrhoea or flux, by way of change of the gaseous fluid in great irritation of the bowels. $\frac{1}{4}$ -dozen box, 10s.

Price of Chests, with "Guide to Farriery"—No. 1, £6/6/0; No. 2, £2/16/6; No. 4, £2/17/6 (for horses only). Carriage paid.

THE RED PASTE BALLS AND RED POWDERS

Invaluable for ill-conditioned horses and after hard hunting and driving. For coughs, colds, staring coat, itching, swollen legs, and want of strength. The Powder is to be given in the feed. 7s. 6d. per dozen.

THE BLACK PHYSIC BALLS

Excellent for confined bowels and for worms in horses, but a bran mash should be first given. In bad cases of worms give a dose of Broncholine after the Ball. For cows and oxen, for stoppage of the bowels, give a dissolved Ball. 8s. per dozen.

THE BRONCHOLINE.Invaluable for huck, hoose, or cough in cattle, calves, and sheep; for tapeworms, and worms in horses. $\frac{1}{4}$ -dozen box, 7s. 6d.**THE GASEODYNE.**Used as laudanum in uncontrollable spasmodic pains in ewes lambing and perfectly safe. $\frac{1}{4}$ -dozen box, 10s. 6d.**THE ALCOHOLIC ETHER.**Used as sweet spirits of nitre in severe colds and shivering fits. $\frac{1}{4}$ -dozen box, 7s. 6d.Prepared only by **DAY, SON & HEWITT, 22 DORSET STREET, LONDON, W.,**

And sold by all Wholesale Houses in London; Hood & Co., Melbourne; Kempthorne, Prosser & Co., Dunedin and Auckland; Fairthorne & Co. Llanneeston; Felton, Grimwade & Co., Sydney and Wellington; Dombrain & Co., Christchurch.

A LIBERAL DISCOUNT TO EXPORTERS, AND ALL PARTICULARS ON APPLICATION.

E. GOULD & SON,

Chemists by Appointment to the London Homœopathic Hospital,
Manufacturers and Importers of

HOMŒOPATHIC MEDICINES

AND

HOMŒOPATHIC SUNDRIES OF ALL KINDS.

PRICE LISTS OF MEDICINES, MEDICINE CHESTS, &c., POST FREE TO ANY PART OF THE WORLD.

59 MOORGATE STREET, LONDON, E.C.

HOMŒOPATHIC MEDICINES.

THE BRISTOL AND WEST OF ENGLAND

HOMŒOPATHIC MEDICINE SUPPLY,

37 HIGH STREET, BRISTOL.

IMPORTANT TO CHEMISTS, PATENT MEDICINE VENDORS, AND HOMŒOPATHIC MEDICINE AGENTS.

Tinctures or Pilules in Bulk of 4, 8, or 16 oz. Bottles, or put up ready for sale in Two Drachm and Half-ounce Bottles. *Before ordering elsewhere send for Wholesale Price List to the Proprietor of the*

BRISTOL AND WEST OF ENGLAND HOMŒOPATHIC MEDICINE SUPPLY,
37 HIGH STREET, BRISTOL.

ESTABLISHED 1843.

THOMPSON & CAPPER,

WHOLESALE AND EXPORT

HOMŒOPATHIC CHEMISTS,

55 BOLD STREET, LIVERPOOL,

And (late HENRY TURNER & CO.)

51 PICCADILLY, MANCHESTER.

ILLUSTRATED PRICE LIST ON APPLICATION.

THOMPSON & CAPPER have now for many years, with the greatest benefit to the Agents throughout the world, supplied, *free of cost*, Books for Gratuitous Distribution, compiled by themselves, containing complete directions for using the Homœopathic Medicines, a plentiful distribution of which invariably ensures a large sale. Handbills also, with name, *ad lib.*

THOMPSON & CAPPER'S

DENTIFRICE WATER.

Sells well everywhere, its beneficent qualities being attested to by physicians in all parts of the world. (*See Testimonials.*)

In 1s. 6d., 2s. 6d., 4s. 6d., and 8s. 6d. Bottles.

Wholesale Agents for the Dominion of Canada:—EVANS, SONS & MASON, Limited, MONTREAL.

STRONGEST "SAFE DISINFECTANTS."

CALVERT'S PATENT 50 % CARBOLIC POWDER

Sold in 6d. and 1s. Tins, 4s. and 8s. per dozen; and in 7-lb. and 14-lb. Self-opening Tins, at 3s. and 5s. 9d. each, less usual discounts. It can be used with water.

CALVERT'S PATENT SOLUBLE CRESOL

Is a combination of Cresylic Acid (Cresol) with Carbolic Acid (Phenol), Creasote, and other ingredients needful to make it a useful disinfectant, readily miscible with water in any proportion. Its antiseptic strength is much above that of any other "Soluble" disinfectant, and consequently it is far more effective.

7,	16,	and 30 oz. Bottles	} Cases extra.
4	8/	12/- per Dozen.	
1	Gallon Tins ...	50/ per Dozen.	
5	"	Drums, 3/9 per Gall.	} Inclusive of Drums and Casks.
36	"	Casks, 3/4 " "	

Full Instructions for use on each Package.

REPORT FROM AN EMINENT SHEEP FARMER IN SOUTH AFRICA.
—"It is without doubt a cure (for Scab), besides having in its favour undoubted cheapness as compared with most other dips."

F. C. CALVERT & CO., MANCHESTER.

Awarded 42 Gold and Silver Medals, Diplomas, &c

FREED FROM PRUSSIC ACID BY AN IMPROVED PROCESS.

UMNEY'S

ESSENTIAL OIL OF ALMONDS

CONTAINS NO PRUSSIC ACID. NO ALCOHOL OR ARTIFICIAL FLAVOUR.

WRIGHT LAYMAN & UMNEY, SOUTHWARK-LONDON.

EIGHT PRIZE MEDALS AWARDED.

GOODALL'S HOUSEHOLD SPECIALITIES.

Yorkshire Relish

THE MOST DELICIOUS SAUCE IN THE WORLD.

This cheap and excellent Sauce makes the plainest viands palatable, and the daintiest dishes more delicious. To Chops and Steaks, Fish, &c., it is incomparable. Sold by Grocers, Oilmen, Chemists, &c., in Bottles, 6d., 1s., and 2s. each.

CAUTION.—On each Yorkshire Relish Label is a Willow Pattern Plate, and name, GOODALL, BACKHOUSE & CO. No other is genuine.

Goodall's Baking Powder

THE BEST IN THE WORLD.

Makes delicious Puddings without Eggs, Pastry without Butter, and beautiful Light Bread without Yeast. In 1d. Packets; 6d., 1s., 2s., and 5s. Tins.

Goodall's Quinine Wine

The best, cheapest, and most agreeable tonic yet introduced. The best remedy known for Indigestion, Loss of Appetite, General Debility, &c. Restores delicate individuals to health and vigour. In Bottles, 1s. and 2s. each.

Goodall's Custard Powder

For making delicious Custards without Eggs, in less time and at half the price. Unequalled for the purposes intended; will give the utmost satisfaction if the instructions given are implicitly followed. Sold in boxes, 2d., 6d., and 1s. each.

Goodall's Blanc Mange Powder

Is acknowledged by all to be the most convenient and economical preparation ever introduced, as, by its use, a most Rich and Delicious Blanc-mange may be produced in a few minutes at a trifling cost, and may be had of various flavours, i.e., Raspberry, Strawberry, Lemon, Almond, and Vanilla. Sold in Packets, 6d. and 1s. each.

Goodall's Egg Powder

Acknowledged to be the only real substitute for eggs yet discovered. Its action on Cakes, Puddings, &c., &c., resembles that of the egg in every particular, enriching them in colour and flavour, rendering them most wholesome and nutritious. One penny packet will go as far as four eggs; and one sixpenny tin as far as twenty. In 1d. Packets; 6d. and 1s. Tins.

SOLE MANUFACTURERS—

GOODALL, BACKHOUSE & CO.,

WHITE HORSE STREET, LEEDS.

A Monthly Price List of Druggists' Sundries, Patent Medicines, &c., can be had post free on application.

STROPHANTHUS,

THE NEW HEART TONIC.

We have at an extravagant cost procured from Central Africa a very limited quantity of Strophanthus. This is the first and only lot that has been offered in the London market.

This new substitute for digitalis was introduced by Dr. Fraser at the last meeting of the British Medical Association, after experimenting with the drug for 15 years. It is the "kombée" arrow poison referred to by Livingstone, and is known as "inée," "onaye," and "onage." It is a woody climber of Equatorial Africa, and probably allied to antiarin, the poisonous principle of the deadly Upas Tree of Java. The active principle abounds in seeds, imbedded in great profusion in the inner walls of pods about twelve inches long.

Strophanthus is not only more powerful on the heart than digitalis, but is free from all other attendant actions and secondary effects of the latter. It seems to be a pure heart tonic. The active principle is freely soluble in water and rectified spirit—a most important point. No cumulative action has been observed even after it has been administered for weeks continuously, and sickness and gastro-intestinal disturbance are not produced so frequently by strophanthus as by digitalis. Scarcely any action is produced by this substance upon blood-vessels directly. Dr. Fraser said:—"As a result of the action on muscle, the heart is easily and powerfully affected. . . . By regulating the dose, a very distinct pharmacological influence may be produced upon the heart, while the other muscles remain apparently quite unaffected." "The systole of the heart is increased, and its contractions are slowed by small doses." "The action of the heart is accompanied by a rise in blood pressure, which appears to be directly produced by it." Thus, "in disturbances of the circulation, when the blood tension was unduly low, strophanthus was capable of producing a diuretic effect."

"Strophanthus," writes Dr. Fraser, "exerts a much more powerful action upon the heart and a less powerful action upon the blood-vessels, than digitalis. . . . In difficulties and embarrassments of the circulation depending upon a central cause, it seems preferable to act on the heart alone, rather than also to increase its difficulties by closing the blood-vessels into which it must empty itself." Strophanthus may "be used with advantage in all weak states of this organ, whatever the cause of weakness," but in case of degeneration, or sufficient compensatory change, it will probably do little good. Dr. Fraser further stated that under its use he had occasionally seen pyrexia disappear, and that very frequently the charts of his apyretic cases exhibited a subnormal temperature.

The quantity we hold is so very small that, in order to accommodate as many customers as possible, we only supply one bottle to any order.

PUT UP IN FORM OF TINCTURE—DOSE 2 TO 6 DROPS—IN $\frac{1}{2}$ -OZ. BOTTLES, AT 2s. EACH.

Burroughs, Wellcome & Co., Snow Hill Buildings, London, E.C.

J. F. MACFARLAN & CO.

EDINBURGH AND LONDON,

MANUFACTURERS OF

MORPHIA AND ITS SALTS,

AND ALL PRODUCTS FROM OPIUM.

PURE CHLOROFORM,

ANSWERING ALL THE TESTS OF THE BRITISH PHARMACOPŒIA.

ALSO, ANÆSTHETIC ETHER, ALOIN, BEBEERIN, CHRYSOPHANIC ACID, SALICIN.

MAY BE HAD FROM ALL THE WHOLESALE HOUSES, AND AT

17 NORTH BRIDGE, EDINBURGH, AND 71 COLEMAN STREET, LONDON.

DR. OSCAR LIEBREICH'S

LANOLINE,

FOR PHARMACEUTICAL AND COSMETICAL PURPOSES.

THE BEST BASIS FOR SALVES AND OINTMENTS. PAMPHLETS ON APPLICATION.

Manufactured by MESSRS. BENNO JAFFÉ & DARMSTAEDTER, Lanoline Works, Martinikenfelde, near Berlin.

Sole Agents—GEO. HALLER & CO., 50 LIME STREET, LONDON, E.C.

IMPORTANT TO CHEMISTS.

HOW TO MAKE THE SPECTACLE TRADE PAY! Sell ONLY the LUMINOUS CHEMICAL CRYSTAL SPECTACLES. Sold only by Chemists. Give half profit, and, by our system of business, prices cannot be cut. Sole Agency granted for small towns. Our New POCKET OPERA GLASS and TELESCOPE, with Case, to retail at 1/3 each, 8/6 per dozen; sample half-dozen, with Show Card, post free, 4/9. A Great Novelty! Selling by Thousands!

J. SCOTT & CO., Opticians, 52 West St., Sheffield.

RESPIRATORS! RESPIRATORS!

SPECIAL PRICE LIST TO CHEMISTS ONLY.

DR. SCOTT'S ECLIPSE RESPIRATORS.

Silver Plates, retail, each 1/6, 2/6, 3/6 Wholesale, /9, 1/2, 1/8
Gold and Silver Plates, retail, each 5/6, 7/6 „ 2/7, 3/6
Gold Plates retail, each... 10/6 Wholesale... 5/

Each in neat box, with retail price and description.

Price Lists Post Free.

Sole Makers—

J. SCOTT & CO., Opticians, 52 WEST ST., SHEFFIELD.

THE "A1" COD LIVER OIL

TRADE MARK.

The new Oil is now ready, and well sustains the special characteristics of the brand.

Price 9s. per gallon in Winchestersters.
12 Winchestersters, 8/6 per gallon.

"In the morning when I discovered the bottle of oil it was covered with ice and frozen to the bottom of the window enclosure. The oil, however, was perfectly unaffected, not merely tolerably clear, but brilliant."

Manufactured at BALSTAD, NORWAY, by
SOUTHALL BROS. & BARCLAY.

20,000 Samples of the A1 Oil and Pelletier's Quinine Capsules are being despatched to the Medical Profession.

PELLETIER'S QUININE CAPSULES.



SULPHATE, in 200, 500, and 1,000 original bottles .. 5/0 per 100.
HYDROCHLORATE, in 200 and 500 original bottles 7/0 "
VALERIANATE, " " " 10/0 "
HYDROBROMATE, 100 and 200 " 8/6 "

Usual Terms, namely—5 per cent. discount three months.

The Capsules are also sold in broken bulk, so that Chemists may box and bottle them in any size suitable for retail purposes.

The usual retail price for the Sulphate is 1/ per dozen, or 1d. each.

WHOLESALE AND EXCLUSIVE AGENTS FOR THE UNITED KINGDOM—

SOUTHALL BROS. & BARCLAY,
BIRMINGHAM.

WHITE "VASELINE."

In Bottles and Cardboard Cases similar in style and size to our regular grade.

EITHER UNSCENTED OR DELICATELY PERFUMED.

2-oz. Bottle, 1s.; 5-oz. Bottle, 2s.; Large size, handsome Bottle, Glass Stopper, 3s. 6d. Usual Discounts.

An exquisite Emollient for the Skin and Complexion, and a perfect Toilet Article.

Perfumed "VASELINE OIL" for the Hair. A New Preparation. 1s. per Bottle.

NOTICE.—The fancy word "VASELINE" is the Registered Trade-mark of this Company.

THE CHESEBROUGH MANUFACTURING CO., 41 HOLBORN VIADUCT, LONDON, E.C.

EGYPTIAN LLOPHARS

We have just received a large consignment of these agreeable Flesh Rubbers and Bath Requisites of exceptional quality and value, which we are offering at

6/-, 8/-, 10/-, and 12/- per dozen.

A few extra large sizes (either cut or uncut), suited for specimens,
14/- per dozen.

WILLIAM TOOGOOD,

WHOLESALE GLASS BOTTLE MANUFACTURER
AND DRUGGISTS' SUNDRYMAN,

35, 36, & 37 MOUNT STREET, GROSVENOR SQUARE, LONDON, W.

WILLIAM TOOGOOD'S REVISED PRICE CURRENT of Glass Bottles, Measures, Earthenware, Druggists' Sundries, &c., will be forwarded post free upon application.

SPECIAL ATTENTION GIVEN TO SHIPPING ORDERS.



COLONIAL BUILDINGS, 42 CANNON STREET, LONDON, E.C.

Published every Saturday.

Subscription 10s. per year, payable in advance;
commencing from any date.

Post free to every country in the world. Single copies, 4d. each.

Supplied only to persons connected with the Trade.

Literary Contents.

	PAGE		PAGE
American Drug Market	213	Editorial Notes—	
Arabian Desert. Domestic Remedies	193	Analyses of 10,000 Prescriptions	202
Australasia, Pharmacy in	192	Waste Carbonic Acid Gas	202
" Manufacture of		Diploma-mongering	203
" Pearlash in	193	Patent Medicine Stamps	203
" Professor A. H. Jackson (portrait)	193	Cocoa and Cocaine	203
Bacillopathy	198	Foreign and Colonial	194
Ceylon, Pharmacy in	197	French Correspondence	193
Ceyloniana	216	French Drug & Chemical Trade	194
Cochineal Industry in Guatemala	199	Gazette	211
Contracts Open	188	Ipecacuanha Whine	200
Corner for Students	189	Jewish Folk-Medicine	206
Correspondence—		Legal and Magisterial—	
"North British Branch." By		On Sale or Return	209
"Scotus"	214	London Bankruptcy Court	209
Patent Medicine Stamp. Letters by J. Phillips; F. Wheeler; W. H. Dean; F. Newbery & Son; and "Harder Times"	214	Metropolitan Reports	190
Paraffinum Melle	215	Notes on Novelties	201
To Chemists' Assistants, Letter by W. Shepperson	216	Obituary	188
Linimentum Ammoniae. By C. J. Rees	216	Provincial Reports	190
Unqualified Assistants	217	Redwood Testimonial Fund; First List of Subscriptions	208
Corn Solvents	217	Reviews and Literary Notes	195
Pepsin in Prescriptions	218	Risky Customers	195
Notes: Dispensing, Legal, Practical, &c.	216-218	Saccharine	199
		Sandal-Wood	197
		Scotch News	191
		Trade Marks Applied for	210
		Trade Notes	188
		Trade Report—	
		Mining Lanc	211
		New York	213
		Veterinary Pharmacy: Gripes	204

The Royal College of Surgeons of England received, during the past financial year, over 20,000*l.* as fees from candidates, whilst nearly 10,000*l.* was paid to the examiners.

Most of our readers who have passed the stage of experimental drudgery will read with amusement, and sympathy for the young analysts, Mr. Moss's account of the struggles after the nitric radicle which are recorded in "Corner for Students."

A youth employed in one of the well-known wholesale drug houses in the City has just discovered that he is heir to estates of the value of at least 250,000*l.* This has come about since THE CHEMIST AND DRUGGIST was published weekly. Is it a case of *post hoc, propter hoc*?

Price's Patent Candle Company, on the suggestion of Mr. G. May, Reading, are preparing a biniodide of mercury soap, to be used as a disinfectant after surgical and other operations. The biniodide, of which there is 0.5 per cent. in the soap, is rendered soluble by the addition of potassium iodide.

DICTATING TERMS.—On the occasion of the laying of the new collegiate buildings by the Queen it is expected that the President of the College of Surgeons (Mr. Savory) will receive an honour from Her Majesty. Speculating upon what this will be, the *Med. Press and Circ.* says that "anything less than a baronetcy" will be an injustice to the profession of surgery.

In the House of Commons on Tuesday last, in answer to Dr. Foster, Sir L. Playfair (Vice-President of the Privy Council) said: A Bill is being drafted, and I hope will shortly be introduced, to amend the Medical Act of 1858. It will contain provisions to give direct representation to the medical profession on the General Medical Council.

If we can trust one of the omniscient medical journals there is a reasonable chance of living for ever. Replying to an inquiring correspondent the able editor says: "Notwithstanding that your patient is a 'lively, rosy, intelligent' child, she will ultimately die unless prolonged and judicious treatment be adopted." From which it would appear that if judicious treatment be adopted, the patient will not die either now or "ultimately."

The Ontario College of Pharmacy have, through the President and other office-bearers, presented a petition to the Lieutenant-Governor of the province respectfully praying "that the sum of five thousand dollars may be set aside in the estimates of expenditure of the province for the current year, in aid of the equipment of the Ontario College of Pharmacy." This building is at present in course of erection, and is expected to be completed for occupation in the autumn.

The Canterbury police caught a man hawking non-poisonous vermin-killer the other day. He did not have a hawker's licence, and was accordingly taken before the magistrate. The authorities were able to prove that he had offered the preparation at *one* house, but as the law defines hawking as going "from door to door," the retailer of the non-poisonous verminicide was dismissed. The vermin-killer was prepared chalk!

LOSS OF THE CUNARD S.S. "OREGON."—The copies of our first weekly issue (March 6) sent to the United States were all lost in the "Oregon." As soon as the news of the total loss of the mails by that steamer reached us, we took immediate measures to supply the missing copies to our American and Canadian subscribers, and we believe we have done this in all cases. If any should have been accidentally missed it is requested that subscribers will apply to our U.S. office, 41 Temple Court, New York, where the deficiency will be supplied.

THE REDWOOD TESTIMONIAL FUND.—It will be seen from the list of subscriptions which we publish on another page that the Redwood Testimonial Fund is supported by an influential and widely-extended circle of the Professor's friends and admirers. At present, however, the subscriptions do not amount to much more than about half what is required to carry out the objects proposed. The sum now announced reaches close upon 700*l.*; the proposed scholarship will need at least 1,000*l.*, and Dr. Redwood's friends hope to add something in the way of personal compliment in addition to memorialising him by a permanent scholarship. It is hoped by the committee that the many students and others who have benefited by his long course of labours and who have not yet added their names will soon make a second list of subscriptions almost as formidable as the one now issued.

THE HOURS OF SHOPKEEPERS.—Mr. A. Redgrave, Chief Inspector of Factories, was examined last week before the Select Committee appointed to consider the Shop Hours Regulation Bill introduced into Parliament by Sir J. Lubbock. He objected to the Bill because under its provisions there would be no possibility of proving evasion, and he did not see how persons who violated the regulations were to be convicted. He thought the only way out of the difficulty would be a further enactment that the occupier of every shop should affix in his window a notice, discernible by the public, stating the hours during which young persons were to be employed. Mr. Redgrave added that he would exempt from the Bill refreshment houses, chemists' shops, licensed houses, and, perhaps, bakers, butchers, and others who supplied food. His opinion was that it would be more satisfactory to fix an hour at which all shops should close than to say, as was said in the Bill, that a certain class of persons should not be employed.

CONTRACTS OPEN.

NAY CONTRACTS.—For the supply of drysaltery, acids and spirits. Tenders received up to noon, March 30. Particulars from Mr. F. T. Edwards, Small Arms Factory, Birmingham, or from the Secretary, Chamber of Commerce, Wolverhampton. For specific quantities of linseed, rapeseed, and train-oils, white tallow, Russian yellow candle tallow, tenders by April 6. For spirits of turpentine tenders by April 9. Forms of tender and all particulars on personal application.

BIRKENHEAD.—For drugs for the Guardians of the Union. Forms of tender from Mr. P. Gregory, clerk, 19 Hamilton Square. Tenders by 10.15 a.m. on March 23.

COLERAINE (IRELAND).—For supplying the workhouse infirmary, fever hospital, and six dispensaries with medicines and medical appliances, for twelve months from March 25, for the Guardians. Sealed tenders received by Mr. W. Henry, clerk, Board Room, Coleraine, up to noon on March 20.

CREMOR (IRELAND).—For supplying the workhouses and dispensaries with medicines, medical and surgical appliances, for twelve months, for the Guardians. Tenders received up to noon on March 18, by Mr. J. Conway, clerk.

DELVIN (IRELAND).—For the supply of medical stores for the Guardians. Forms of tender from Mr. J. King, clerk. Tenders by March 19.

DOWNPATRICK (IRELAND).—For supply of medicine and medical appliances at the workhouse and dispensary stations for twelve months. Form of tender from Mr. J. W. Montgomery, clerk of union, Downpatrick Workhouse. Tenders received up to 11 a.m. on March 20.

DUNMANWAY (IRELAND).—For supplying the workhouse and three dispensaries with medicines and medical appliances, for twelve months, for the Guardians. Forms of tender from Mr. P. O'Sullivan, clerk. Tenders by March 19.

DUNDERRY (IRELAND).—For supplying medicines and medical appliances for the workhouse and six dispensaries from May 1, 1886, to May 1, 1887, for the Guardians. Form of tender from Mr. T. H. F. Bor, clerk, and tenders received (accompanied by sample, where practicable), by the clerk up to 11.30 a.m. on March 20.

KILKEEL (IRELAND).—For supplying the workhouses and dispensaries of the union with medicines and medical appliances for twelve months, from March 25, for the Guardians. Tenders will be received by Mr. T. Graham, clerk, Board-room, up to 12 noon on March 22.

LIMAVADY (IRELAND).—For supplying workhouses and dispensaries, up to March, 1887, with medicines and medical appliances, for the Guardians. Forms of tender from Mr. W. Crawford, clerk of union.

LONDON, N.W.—For the supply of drugs for the Guardians of St. Pancras. Forms of tender on application. Tenders to Mr. A. A. Millward, clerk, Vestry Hall, Pancras Road, N.W., before 10 a.m. on March 19.

LONDON, S.E.—For the supply of drugs for the Guardians of Lambeth parish. Forms of tender and all information between 10 and 5 at the office of Mr. W. B. Wilmot, clerk, Brook Street, Kennington Road, S.E. Tenders to the clerk by March 23.

LONDON, W.—For the supply of drugs for the Guardians of the parish of Paddington. Forms of tender from Mr. H. F. Aveling, clerk, Windsor Terrace, Harrow Road, W. Tenders by March 23.

MIDLETON (IRELAND).—For the supply of medicines for the Guardians of Middleton Union. Tenders by 11 a.m. on March 27. Mr. W. Roche is clerk.

NEWTOWNARDS (IRELAND).—For supplying the workhouse and dispensaries of the union with medicine and medical appliances for the Guardians for one year from March 20. Particulars from Mr. Colville, clerk, Board-room. Tenders by March 20.

NOTTINGHAM.—For the supply of drugs for the Guardians. All information of the porter at the workhouse. Tenders to Mr. G. M. Howard, clerk, York Street, by 4 p.m. on March 22.

PETERBOROUGH.—For the supply of drugs for the union, for the Guardians. For forms of tender and information apply to Mr. E. Vergette, jun., clerk. Tenders to the Board-room, Westgate, by 10 a.m. on March 20.

ROCHDALE.—For the supply of drugs for the Guardians. Forms of tender at the union offices, Townhead. Tenders to Mr. J. Holgate, clerk, by March 23.

ROSCREA (IRELAND).—For supplying medicines and medical and surgical appliances to the workhouse and several dispensaries in the union, for one, two, or three years, for the Guardians. Particulars from Mr. Thomas Dooly, clerk of union, Board-room, Workhouse, Roscrea. Tenders received up to 1 p.m. on March 25.

SKIBBEREEN (IRELAND).—For supplying the workhouse and four dispensaries of the union with medicines and medical and surgical appliances for twelve months, for the Guardians. Forms of contract from Mr. Charles Clerke, clerk. Tenders by March 20.

TOBERCERRY (IRELAND).—For supplying the workhouse and dispensaries of the union with medicines and medical appliances for twelve months, for the Guardians. Tenders received up to 11 a.m. on March 22, by Mr. J. Donohue, clerk.

TULLA (IRELAND).—For supplying the workhouse and the three dispensaries of the union, carriage free, with medicines and medical and surgical appliances for year ending March 25, 1887, for the Guardians. Forms of tender from Mr. T. Murphy, clerk, Union Office, Tulla. Tenders by March 23.

WOOLWICH.—For veterinary and surgical attendance on the horses of the Local Board. Particulars at the Board's Offices, Town Hall, Woolwich. Tenders to be delivered before 7 p.m. on March 23.

YOUGHAL (IRELAND).—For supplying workhouse and five dispensaries with medicines, medical and surgical appliances, from March, 1886, to March, 1887, for the Guardians. Forms of tender from Mr. J. H. Ronayne, clerk. Tenders received up to March 19.

Trade Notes.

MESSRS. H. H. WARNER & Co. (the proprietors of Warner's Safe Remedies), of Rochester, New York, have opened a branch at 47 Farringdon Street, London, E.C.

* *

MESSRS. T. F. BRISTOW & Co., manufacturing perfumers, of Bishopsgate Avenue, will remove on March 25 to larger premises, situate in St. James' Walk, Clerkenwell, E.C., near to Farringdon Street Station.

* *

SPRATTS PATENT (LIMITED) have opened a sale-room (in telephonic communication with their works) at 4 Great Tower Street, E.C., where they show samples of all their dog, game, poultry, and pigeon foods, medicines, and appliances.

* *

MESSRS. J. G. SCHÜTTE & E. H. OLDENDORFF, drug merchants, of 59 Mark Lane, have dissolved partnership. Mr. Oldendorff retains the mercantile business and Mr. Schütte announces that he has completed the erection of a quinine factory at Bromley, and will devote himself to the manufacture of that alkaloid.

Obituary.

MORGAN.—On March 4, Mr. William Hitchings Morgan, chemist and druggist, Pentre Ystrad. Aged 42.

PETERS.—On March 10, suddenly, Mr. J. F. Peters, of the Jedburgh Dispensary, at Marseilles.

PINKERTON.—On February 17, Mr. John Stark Pinkerton, chemist and druggist, Glasgow. Aged 58.

SKINNER.—On February 26, Mr. Thomas Skinner, pharmaceutical chemist, Gloucester. Aged 54.

TOMLINSON.—On February 9, Mr. William Tomlinson, chemist and druggist, Glossop. Aged 59.

CORNER FOR STUDENTS.

CONDUCTED BY RICHARD J. MOSS, F.C.S.

QUALITATIVE ANALYSIS.

THE subject of the next exercise in qualitative chemical analysis will be a mixture of salts. The mixture is to be submitted to a thorough systematic examination, designed not only to detect the constituents of the mixture, but also to demonstrate the absence of other substances. The reports sent in by students should give a brief account of the analysis, with a list of the metals and acid radicals detected.

Applications from students desiring to compete should be sent in not later than March 25. Portions of the mixture of salts will be sent to applicants on the 30th.

Students' reports will be received up to April 15.

REPORTS.

The subject of the last exercise was a mixture consisting of:—

Potassium alum	Parts
Manganous sulphate	60
Ammonium nitrate	25
	5

100 parts of this mixture therefore contained:—

Al	3.87
Mn	6.34
K	5.48
NH ₄	1.25
SO ₄	38.04
NO ₃	4.30
H ₂ O	40.72

100.00

Thirty reports of analyses were sent in. Eight of these record the detection of zinc, of which there was not a trace present. In ten cases magnesium is stated to have been detected; in nearly all these it is noted as a trace. Twelve students detected chlorine, which was present in minute quantity. The failures in the detection of the constituents of the mixture were as follows:—The nitric radicals, 17; ammonium, 8; aluminium, 4; manganese, 4; potassium, 3. None of our contributors failed to detect the presence of the sulphate. It is noteworthy that 1¼ per cent. of ammonium was found much less difficult of detection than 4½ per cent. of the nitric radicle. On account of its volatility, ammonia is easily isolated, and the tests by which it may be recognised are easily applied. On the other hand nitric acid cannot be conveniently isolated by any method which would be generally applicable in analytical work, and it is usually recognised by indirect tests which require some manipulative skill. It might be supposed that from the thirty reports before us, it would be easy to pick out the method which succeeded best in the hands of a number of students working under very different conditions. Few of the reports are, however, sufficiently explicit to admit of general conclusions of any value being drawn from them. Out of the thirteen students who detected nitrates, seven state that it was by means of the ferrous sulphate test, but do not say how it was applied; three added concentrated sulphuric acid to a cold aqueous solution of the original powder, to which ferrous sulphate had been added; one added the acid first, and then a solution of ferrous sulphate; two concluded that nitrates were present from having observed that nitrous fumes were evolved on heating the original substance. Of the seventeen students who failed to detect nitrates, five give no particulars; three

state that they obtained negative results with the ferrous sulphate test; three added sulphuric acid to an aqueous solution, and then a solution of ferrous sulphate, a method which was successful in the hands of only one student. Two obtained negative results with the copper test; one observed no nitrous fumes on heating the dry powder; while one obtained no precipitate with the ferrous sulphate test, and two appear never to have thought of nitrates at all. The only conclusion of any value to be drawn from these results is that the particular test employed is not of so much importance as the skill and intelligence brought to bear upon it by the student. It is only too apparent from the reports before us that many of our contributors have merely read about the reactions that they attempt to utilise, and that they have not made a practical study of them. It is true that book-work will go a long way towards supplying a knowledge of the principles upon which analytical operations are based, and without this knowledge the most skillful analyst is a mere machine. It is also true that even the most thorough acquaintance with theory will not make a successful analyst, unless it is combined with that power of accurate observation and that manipulative skill which can be acquired only by practical work.

PRIZES.

The First Prize for the best analysis has been awarded to—
Mr. R. WATT, 20 Castle Place, Belfast.

The Second Prize has been awarded to
Mr. C. B. GILSON, 39 High Street, Margate.

Marks Awarded for Analyses.

R. Watt (first prize)	93	J. B.	70
C. B. Gilson (second prize)	95	"Punctum Cocum"	70
"Aesculap"	93	"Campanula"	68
A. Latchmore	90	"Foi est tout"	65
"Inex"	88	A. H. C.	65
A. Burns	85	"Ammon. brom."	63
"Lettiklaw"	83	J. Stanley	62
E. J. Millard	80	R. Watts	60
B. W. G.	80	"Corrigenda"	60
W. Burns	75	C. M. Barnes	50
"Metastasis"	75	J. Austin	45
"Vanadium"	75	"Drugs"	20
"Dambrose"	73	J. R. M. S.	18
A. Shaw	72	S. Gibbs	15
A. Newton	70	"Mem"	15

TO CORRESPONDENTS.

Prizes.—The students to whom prizes are awarded are requested to write at once to the Publisher, naming the book they select, and stating how they wish it forwarded.

Any scientific book that is published at a price not greatly exceeding half-a-guinea may be taken as a first prize.

Any scientific book which is sold for about five shillings may be taken as second prize.

. All communications should include the names and addresses of the writers.

C. B. GILSON.—Your results were very good. A more complete and systematic account of your work would have been greatly in your favour.

INEX.—When ammonia is added to a solution of manganous salt, part of the manganese is precipitated as hydrate. The acid radicle thus liberated combines with some of the ammonia, and a double salt of ammonium and manganese is now formed; this salt being soluble in alkalis, no further precipitation of manganese takes place. If a salt of ammonium is previously added to the manganous solution, ammonia causes no precipitate, because all the manganese passes into the condition of a soluble double salt. This is one of the reasons why ammonium chloride is added before ammonia in the usual course of analysis.

A. BURNS.—Some students are not provided with chemical balances and other expensive apparatus required for quantitative work, and for this reason quantitative results are not required.

W. BURNS.—You ought to try a series of experiments to ascertain what is the smallest quantity of ammonia that you can detect, and what is the best way of detecting it.

METASTASIS.—If the sulphuric acid and ferrous sulphate test is properly applied, it is capable of revealing the presence of minute quantities of nitric acid. It is only by trial that you can find out the right way to manage.

A. H. C.—The re-precipitation of what you took to be ammonio-magnesium phosphate from a hydrochloric-acid solution by adding ammonia does not prove the precipitate to have contained magnesium. Any other phosphate soluble in an acid and insoluble in alkali would behave in the same way.

CORRIGENDA.—The precipitate produced by ammonia contained no doubt some manganese thrown down by the action of the oxygen of the air upon the manganous compound in solution, but by far the greater part of it consisted of aluminium hydrate.

J. AUGUST.—The method which you employed for the separation of the members of group 3 is one of the best that can be adopted, but all the details require most careful attention.

DRUGS.—You confine your attention too much to proving the presence of certain substances, forgetting that you must also show other bodies to be absent.

J. R. M. S.—A much more exhaustive examination is necessary.

MEM. and S. GIBBS.—You should practise the analysis of mixtures of known composition containing the metals in various proportions. You ought to make a special experimental study of the separation of the metals precipitated by ammonia and ammonium sulphide.

Metropolitan Reports.

RESPIRATORS AND LEAD-POISONING.—On Saturday last Mr. Cartar held an inquest at Greenwich on the body of Frances Pollard, aged 22. The body was identified by deceased's mother, who said her daughter had been employed at Messrs. Pontifex & Wood's lead works, Millwall, Isle of Dogs. On Sunday evening she complained of the lead, had several fits, became insensible on Monday, and died on Tuesday. In the course of the inquiry the manager stated that it was exceedingly difficult to get the female workers to wear the respirators which were provided for them, and the firm had fined no less than twenty women for infringing the rule. Dr. Corner, the Medical Officer for Poplar, stated that the regulations were strictly enforced in the works. The deceased had always reported herself as well. Regarding the use of respirators, he said that a practised hand, by keeping her mouth shut and occasionally expectorating, would be better without one. Mr. Ridder, Inspector under the Factory Act, said that the use of the respirator should be enforced in the work of emptying the stove; and Dr. Hart, Medical Officer of Health for Greenwich, said that a respirator was of little use unless it covered the nose. Verdict—that deceased died from lead-poisoning.

Provincial Reports.

BIRMINGHAM.

ONE of the cutting firms in this town showed their spirit of enterprise by running a cheap excursion for the day from Nottingham, Derby, Barton, and Lichfield at low rates, varying from 2s. 6d. to 1s. 6d. for the double journey. The excursionists had the benefit of many novel advantages. By showing their railway tickets at the "stores," they were paid the "extra-door" admission fee to the Grand and Prince of Wales Theatres. If the trippers were tempted to take advantage of the clearance sale taking place at the said stores, and made purchases to the extent of 40s., the money paid for the railway journey was refunded to them. This unique method of importing business into the town is a decided novelty.

Mr. Arthur Robottom, of "Borax" fame, has started for Turkey, where he has discovered new deposits of a boracic nature, for which he is negotiating with the Sultan on behalf of a number of English merchants. Mr. Robottom has previously manifested his energy as a traveller and explorer in California and elsewhere.

It is contemplated to have an exhibition of "Manufactures" in Bingley Hall during the time that the British Association hold their meetings here. Space will be allotted only to

manufacturers of Birmingham and district, consequently those of our craftsmen who pay us a visit during the Pharmaceutical Conference, which is to be held at the same time, will be able to judge for themselves what the "Midlands" can produce.

A man who was going to a fancy dress ball lately held in this town cut himself slightly in shaving; he then proceeded to make up as a "Zulu," colouring his face with a mixture of which red-lead formed the chief ingredient. At the ball he was one of the most prominent and vivacious maskers; but the red lead entering the scratch on his jaw caused terrible blood-poisoning, and medical aid proved quite unavailing, the poor fellow dying in great agony.

An inquest was held on March 12, by Mr. Hawkes (coroner), respecting the death of Edwin Floyd, publican, of 132 Bridge Street West. Deceased had told one of his acquaintances that he had a dog which he wanted to poison. He said that chemists refused to sell poison to any person unaccompanied by a witness, and at deceased's request the man went with him to Messrs. Canning & Thornton, Great Hampton Street, and purchased a quarter of an ounce of prussic acid, which he afterwards took. Verdict, "Suicide whilst temporarily insane."

CHESTER.

A TROUBLESOME CHEMIST.—On March 12, at the City Police Court, William Carman, a chemist, Frodsham Street, was bound over to keep the peace after a charge of using threatening and abusive language to his wife had been heard.

HANLEY.

POISONING WITH CARBOLIC ACID.

ON March 12 an inquest was held on the body of Adelina Williamson, aged 17 years and 3 months, who had died under suspicious circumstances on the previous day. In the course of evidence the father of the deceased stated that he had a suspicion that she was *envenime*, and he identified, as the deceased's handwriting, a note which read, "Please to give this girl two pennyworth of carbolic acid, for her mother." Mary E. Mayatt, a girl of 10, deposed that deceased on the previous evening had given her a piece of paper and 2d. These she took to Mr. Scarlett's shop in Piccadilly, and was sent back to get a bottle. On returning with the bottle, it was "half filled with some red-coloured stuff," which she took to deceased. There were two pieces of paper on the bottle—one containing writing in red ink.—The Coroner: Did Mr. Scarlett ask you anything at all?—Witness: No.—Did he not ask you where you came from?—No.—He did not ask you who wrote it?—No, sir.

After some further evidence the inquiry was adjourned until Tuesday of this week, to permit of a post-mortem examination. At the adjourned inquest, Mr. C. H. Phillips, surgeon, gave evidence as to attendance when the deceased's body was discovered. He, in company with Dr. Spanton, had made a post-mortem examination. The stomach had a very distinct odour of carbolic acid. Dr. Spanton gave corroborative evidence, and stated that two tests were applied to the contents of the stomach, and they were conclusive as to the cause of death being the taking of carbolic acid. In his opinion there ought not to be any restrictions placed upon its sale, as it was a valuable disinfectant. Mr. W. Scarlett, chemist, deposed to supplying 2 drachms of carbolic acid to a child, who brought a piece of paper asking for it. He labelled the bottle "Carbolic Acid" and "Poison." The labelling of the bottle was a precautionary act on his part, at his discretion. He did not caution the child, but told her plenty of water must be put to it. He thought it was for external use.

After some further evidence as to the deceased's condition, the coroner summed up, stating that he thought the deceased had taken the carbolic acid through ignorance. The jury retired, but could not agree as to the motives of deceased, and after a consultation with the coroner, returned a verdict to the effect that death was caused by carbolic acid—probably taken accidentally.

SHEFFIELD AND DISTRICT.

(Special Correspondence.)

AT Malton, two farm servants have had to pay each 1*l.* 8*s.* and costs for administering a mixture of sulphuric acid and butter of antimony with some antimonial powders to horses over which they had charge. Mr. Ringrose, veterinary surgeon, deposed that at the present time he had under his care twenty horses suffering from poison administered to them. The men would have been sent to prison, but the prosecutor appealed for leniency; he believed they had no felonious intention, but desired to make the horses sleek in coat.

Here is a good opportunity for graduates of Bloomsbury anxious to advance in their profession:—

MEDICAL.—WANTED, a good Market LECTURER, well up in the business, to Sell and Advertise Patent Medicine. Horse and carriage found.—Address C. Durant, Boston, Lincolnshire.

A child has been poisoned at Doncaster by sucking the phosphorus off the ends of matches.

"We know of a case," says one of our daily papers in an article on trade frauds, "in which a superbly-attired commercial traveller submitted to a wholesale chemist a white powder, impalpable, and of a silky smoothness, which he termed his 'Universal Improver,' which improver he could deliver at the wharf in London at 4*l.* per ton. His wonderful 'Improver' was simply *terra alba*, a natural white earth, finely levigated. That traveller was in outward adornment an exquisite of the first water, and he regarded with a sort of paternal, patronising, and half-pitying wonder the vernal simplicity of the chemist who failed to appreciate the hint that the sleek powder before him was absolutely undetectable when mixed with almost any article that was finely ground."

A young woman, after purchasing a large quantity of sulphate of copper at a chemist's in Manchester, rambled into Derbyshire, and on Sunday morning last was found lying in a field near Chapel-en-le-Frith, suffering from the effects of some of the poison she had taken the night previous. She would have lost her life had she taken a smaller dose, but having taken too large a dose she vomited it back again.

The firm who first introduced "reduced patents" in Sheffield are gradually *reducing* their numerous branch establishments. At one time they had eight or ten shops, now they have only two establishments in the centre of the town.

At the last meeting of the local Association, held on March 10, a paper was read by Mr. J. O. Arnold, F.C.S., on "The Estimation of Arsenic in Viscera." The author pointed out the easy detection of arsenic in large quantities upon the floor, carpets, or vessels where the vomit had lain. His investigations were of a very patient and thorough character, and were detailed with great lucidity. They had only extended to cases of acute poisoning. He was pursuing them in the direction of chronic, or cumulative, poisoning by arsenic.

SCOTLAND.

EDINBURGH.

INDUSTRIAL EXHIBITION.—All the space allotted for chemicals and pharmaceutical products was taken up some time ago. The exhibition is expected to be a great success.

The Conversazione of the Assistants' Association is to be held in the Literary Institute on April 9. Tickets may be obtained from the Secretary, 21 West Richmond Street, or from Mr. Hill, 36 York Place.

Those interested in the local evening meetings are asking whether we are to have any more during this session. It is not a hopeful sign to hear of the powers that (ought to) be holding revolutionary meetings away from the Society's house. It is a pity that good time should be frivelled away in political agitation, to the exclusion of scientific considerations. Admitting the Society to be a serious offender, surely

humble Science has not given cause to be neglected. Her followers here are, we believe, as true to her as ever in their allegiance, but at present they are as "sheep without a shepherd."

The Committee appointed by the meeting of Scottish chemists held on March 10 met, we believe, at 5 St. Andrew's Square on Tuesday, and had a session of about two hours. A sub-committee was appointed at the close.

EDINBURGH CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION.

A MEETING of this Association was held at 36 York Place on Wednesday, March 10, at the usual hour. After the minutes were read Mr. Thomas Stephenson gave a lantern demonstration of minute forms of plant life. Mr. William Aitkin acted as operator, and Mr. Stephenson played the *rôle*, first of the *savant*, and then as the "Artemus," of the show. In the first part a series of beautiful slides of freshwater algae, *Pleurococcus*, *Volvox*, *Diatoms*, &c., were shown, their life history and prominent features described in an interesting manner, and the lecturer paid equal attention to *Bacteria*. He then passed on to the second part of the programme, which at first somewhat surprised the audience. The slides were gay and very funny, the showman's description grave and intensely scientific. Ultimately it dawned upon the members that this was a little joke, and they entered enthusiastically into the fun, and this passed into warm enthusiasm when the portrait of an old favourite was thrown upon the screen.

Mr. Stephenson was awarded a hearty vote of thanks for his unique entertainment. Before the members retired the Secretary read a letter from Mr. J. R. Hill intimating that he felt it his duty to resign the office of president which he held, because of his appointment to an official position in the Pharmaceutical Society. After a warm tribute had been paid to Mr. Hill for his work on behalf of the Association during seven years, Mr. J. B. Dunlop, vice-president, was raised to the presidency for the remainder of the session. The Association meets again on Wednesday next.

THE SCOTCH GRIEVANCE.

SINCE the publication of our special report of the meeting of the Scotch adherents of the Pharmaceutical Society, held in Edinburgh on March 10, we have received what we may term an official report. The Chairman (Mr. H. B. Baildon, B.A.) in the course of his speech stated that he had had a correspondence with the assistant-secretary of the Society (*né* secretary of the Branch). The result of this correspondence was that he (the Chairman) had felt it necessary to ask "a series of definite questions as to the circumstances under which the Scotch adherents of the Society might have the use of the York Place rooms for holding meetings. They had had the use of the Edinburgh rooms of the Society for thirty years, yet when such a meeting as this was spoken of he did not think that it was consistent with their dignity to ask permission to meet in their old quarters."

The question which Mr. D. McLaren asked was, If it was the case that the Council of the Branch insisted on having a legal qualification? The Chairman replied that the whole dispute had arisen from the action of the President of the Society, who said the position was illegal. The Branch Council said, "If you are to take away from us what we have by prescriptive right you must give us a basis for the future."

It was afterwards pointed out that the increased value of the Society's property in Scotland had opened up the question of the legality of the Scotch Council, on which one member stated that the George Street property was valued at 700*l.* or 800*l.*, and was as much worth looking after as the new property; the principle was the same.

A good deal was said regarding the by-law which the Council of the Society proposed in order to legalise the Committee of the Branch.

The Chairman and other influential members stated that they had no objections to the Committee or even to the by-law proposed, but they most distinctly wanted their position defined once for all, and that could best be done by a by-law applicable to Scotland itself, not a general by-law which might bring a Scotch Committee into existence one year and wipe it out the next.

Mr. Storrar made a stirring speech, in the course of which he said that the Scotch adherents of the Society would demand that all reference to the unfortunate dispute should be wiped from the minutes of the Society.

In the report which we have received it is stated that 15 voted for Mr. Watt's motion, and 10 for the amendment.

HAWICK.

Mr. T. J. S. Blaine, who succeeded two years ago to the business carried on by the late Mr. T. H. Hopper, at 3 High Street, has just purchased the premises 5 High Street, to which he proposes to move in the course of next month.

JEDBURGH.

Mr. J. F. Peters, who for the last thirty years had carried on business in Jedburgh, died on March 10 at Marseilles, whither he had gone for the benefit of his health. The business, which is one of the best in the South of Scotland, now passes into the hands of Mr. Walker, who entered into partnership with Mr. Peters some time ago.

PHARMACY IN AUSTRALASIA.

THE last mail from the antipodes brought us a large budget of news from our representatives, from which we extract the following items of trade interest. From all quarters come gratifying testimony and support to us in our new venture.

NEW SOUTH WALES.

The Pharmaceutical Society held a meeting on January 12, the President, Mr. W. Larmer, in the chair. The Secretary laid various communications on the table, amongst which was a full report of the case of Behag v. Soul, tried in the district court, Sydney. Mr. Thomas A. Graham (a native of Stirling, Scotland) was elected a member. The Society unanimously resolved to continue to support THE CHEMIST AND DRUGGIST OF AUSTRALASIA.

The Pharmacy Board has decided to recommend a revision of the Poisons List. It may interest your home readers to know some of the leading features of this list. In the *first part*, along with strychnine, arsenic, and the like, we have *laudannum*. In the *second part*, which comprises such potent but rarely retailed substances as cyanides, tartar emetic, and laural water, we have opium preparations other than *laudannum*, carbolie acid, euphorbium, hellebore, iodine, podophyllin, iodide and bromide of potassium, scammony, valerian, acetic acid, chlorodyne, &c. The wisdom of including some of these remedies in the list will be appreciated by British pharmacists.

In connection with the Pharmaceutical Society here, it is interesting to note that the Secretary, Mr. Pinhey, is the oldest pharmacist in the colony, but the palm for age of establishment has to be given to the pharmacy of Mr. Frank Senior, Sydney. The fiftieth anniversary of the establishment of his business was recently celebrated. Mr. Senior enjoys the patronage of his Excellency the Governor of the colony, and though now well up in years, he is actively engaged in business, and takes great interest in public affairs. He is closely connected with many charitable and benevolent organisations, to all of which he gives both time and enthusiastic work.

There is every sign that pharmacy is in a good condition in this colony; businesses are changing hands, and new starts are frequent. Amongst these may be noted that Mr. Jones, Surrey Hills, has purchased the business of Mr. T. Ellis, Market Street, there, and is to carry it on as a branch. Mr. Bishop, of Balmain, has taken over the management of the dispensing department of Messrs. Soul & Co.'s establishment, his own business meanwhile being in good hands. Mr. Pallin, of Redfern, has opened a second pharmacy in Elizabeth Street there, and has every hope of success. The cholera scare is subsiding, and the authorities have revoked the proclamation which placed in quarantine all vessels arriving from Queensland.

NEW ZEALAND.

At the last meeting of the Wellington Branch of the Pharmaceutical Society (December 18), Mr. Barraud in the chair, it was resolved to reduce the subscription, but the amount of reduction was allowed to remain a question for future settlement. The fact that reduction is spoken of in Wellington is important. The branch here deserves, perhaps more than any other, credit for its strenuous efforts to organise the trade and to inculcate high educational influence in pharmaceutical subjects. Mr. Barraud, the first President of the Pharmacy Board, and Mr. J. A. Allen, the Secretary, are still energetically engaged in promoting the interests of the Society. Other towns share the honours with Wellington. At present the head office is situated in Auckland, and Mr. Graves Aicken is President. His experience as President of the Chamber of Commerce, as well as his labours on the Pharmacy Board in the past, go far to show that good things are yet to be gained for the members of the Society.

It is to be hoped that the Board will have some influence, for example, regarding the hy-laws of the Society. Here the condition is almost the reverse of what it is at home. In England making of hy-laws, and special general meetings to confirm them, are simply accomplished; it is the sanctioning of them that brings difficulty. But in New Zealand we would have little trouble in getting the official sanction, it is the preliminary steps which cannot be made. This is due to the fact that, under the Pharmacy Act, 1880, hy-laws require "to be confirmed and approved by a special general meeting of pharmaceutical chemists." That may appear an easy enough thing to you, but the trouble is that the Act does not provide power to summon a special general meeting, and the sum and substance of the matter is that *we are entirely devoid of means to make hy-laws*.

There are other matters which require looking into. At present any person can keep open shop provided he do not use any of the titles mentioned in the Act. And again, the Board can only accept the certificates of the Pharmaceutical Society of Great Britain; it has no power to accept those of neighbouring colonies. Quite recently the Board had an application from the New South Wales Society for reciprocity. This gave the Board an opportunity to remind that Society of the unanswered communication of 1884, and at the same time it could only state that reciprocity could not be talked of until the New Zealand law is amended.

Meanwhile the chemists of Canterbury have stirred themselves in this and other matters, and have instituted a canvass, and we await the result of their efforts.

BUSINESS CHANGES.—Mr. J. S. Cooke has purchased the business of the late Mr. Robinson, Cashel Street, Christchurch. Mr. Joseph Stevens, of the same town, wishes to dispose of his business in order that he may return to England. Mr. A. Kameritzer has purchased the business hitherto carried on at Ashburton by Mr. J. M. Cambridge. A new pharmacy has been opened in Port Chalmers by Mr. N. Dodds. Turning to Auckland, we find there evidence of enterprise on the part of Mr. John Edson, a member of the present Pharmacy Board, and an old local pharmaceutical organiser. He has recently had plans made for a substantial building, which in technical design bids fair to be one of the prominent buildings of the city. Workmen are now busy upon the structure, which makes rapid progress.

After much talk there is a likelihood that we shall have an Intercolonial Pharmaceutical Conference this year. It will be held in Melbourne, and we calculate upon good guidance and sound advice from the original conference at home.

The Hop Bitters Company still continue their efforts through their representative, Mr. Davis, and advertising arrangements and results are of a gigantic nature.

QUEENSLAND.

It may interest home readers to know of a few business transactions which have lately taken place in this colony. First, new starts: Mr. T. N. Taylor (a London gentleman), in Charters Towers; Mr. J. Evans, in Rosewood; Mr. Roland, in Maryborough; Mr. L. W. Camb, in Murbury, near Rosewood; and Mr. Connelan, at Gatton.

Amongst transfers, Mr. Vaughan, Southport, has disposed of his business to Mr. Moore, late of Mitchell. Mr. Vaughan

has bought the business in Rockhampton which has hitherto been carried on by Mr. Meade, who is in ill-health. Mr. Roland, who has proceeded to Maryport, previously disposed of his Bundaberg business to Mr. J. Davidson, of Stanthorpe; and Mr. A. Scowen, of Sydney, has purchased the business of Mr. Von Berger, Minton.

The most important matter which we have to record is that the cholera scare in the colony has collapsed. Nevertheless, the Government has appointed a board of inquiry, consisting of Drs. Bancroft, Marks, Thomson, and Wray. These gentlemen are to report on the cause of the outbreak, and draw up precautions for the future. A code of regulations for disinfection is much required, not only for house and street disinfection but for sanitary arrangements generally.

We pride ourselves in the colonies upon our finely equipped pharmacies, and another has been added to the number in the new establishment of Messrs. Atkinson and Powell, of Townsville. This they have recently entered, and business is prosperous with them.

Mr. Martin, Queen Street, Brisbane, has been appointed chemist to his Excellency the Governor of Queensland.

Mr. Clement Wragge, F.R.G.S., well known at home in connection with his meteorological observations on Ben Nevis, has been making the tour of this colony, and is charmed with its climate.

SOUTH AUSTRALIA.

The weather in Adelaide has been most oppressive. One observer records the rather alarming temperature of 173° in the sun. This is too much, but 110° in the shade is quite common, and we do not find it so hard to bear as the oppressive 100° in Melbourne.

THE CHEMIST AND DRUGGIST is making many friends in South Australia, where the Pharmaceutical Society is most active in furthering pharmaceutical interests, commercial and professional. The examinations of the Society are half-yearly, and the qualifications required are classical and technical, similar to those in Great Britain. Nearly the whole of the chemists in business in the colony are members of the South Australian Society (which subscribes for THE CHEMIST AND DRUGGIST *en bloc*).

MANUFACTURE OF PEARLASH IN AUSTRALASIA.

BARON FERD. VON MUELLER, K.C.M.G., of Victoria, says that the wood, bark, branches, and foliage should be burnt in pits sunk 3 feet or 4 feet in the ground: the incineration is continued until the pit is almost filled with ashes. Young branches and leaves are usually much richer in potash than the stem-wood, hence they should not be rejected. The ashes thus obtained are placed in tubs or casks on straw over a false bottom. Cold water, in moderate quantities, is poured over the ashes, and the first strong liquid removed for evaporation in flat iron vessels, while the weaker fluid is used for the lixiviation of fresh ashes. While the evaporation proceeds fresh portions of strong liquid are added until the concentrated boiling fluid assumes a rather thick consistence. At last, with mild heat and constant stirring, the whole is evaporated to dryness. This dried mass represents crude potash, more or less impure, according to the nature of the wood employed. A final heating in rough furnaces is needed to expel sulphur compounds, water, and empyreumatic substances: also to decompose colouring principles. Thus pearlsh is obtained. Pure carbonate of potassium in crude potash varies from 40 to 80 per cent. Experiments have given the following approximate result with respect to the percentage of potash in some of our most common trees. The woods of the Casuarinas, or she-oaks, as well as that of the black or silver wattle, are somewhat richer than the wood of the British oak, but far richer than the ordinary pine woods. The stems of the Victorian blue gum (*Eucalyptus Globulus*) and the so-called swamp tea-tree (*Melaleuca ericifolia*) yield about as much potash as European beech. The foliage of the blue-gum proved particularly rich in this alkali, and as it is heavy and easily collected at the sawmills, it might be turned to profitable account there,

and, indeed, in many other spots of the ranges. In the Queensland coast country the mangrove could be made to yield potash in immense quantities, as it is richer in this alkali than almost any other native tree or shrub; and even if the mangrove were not used for the manufacture of potash, the ash being rich in this valuable fertiliser, could be easily and economically applied for manurial purposes. Of course British woodmen are aware that it is hopeless to compete with the extensive mineral deposits in Germany, where most of the potash of commerce is now obtained.

THE NEW PROFESSOR OF PHARMACOLOGY AT MELBOURNE.

PROFESSOR A. H. JACKSON, whose portrait we print below, and whose career we briefly sketched in our issue of February 15, will shortly leave this country to fill the chair of Pharmacology which has been founded by the Phar-



maceutical Society of Australasia, and is affiliated with the University of Melbourne. Mr. Jackson was selected for this position by the President of the Pharmaceutical Society, Professor Atfield, and Mr. Plowman, who were requested to act on their behalf by the Society at Melbourne.

FRENCH CORRESPONDENCE.

(From our Special Correspondent.)

A NEW ACADEMICIAN.—On Monday, March 15, the Academy of Sciences elected M. Halphen, to take the seat of the late M. Bousquet, in the section of Geometry.

CHANGES AMONG HOSPITAL PHARMACISTS.—M. Bourquelot, formerly at the Clinique d'Accouchements, has been appointed to the Enfants Malades Hospital, *vice* M. Bourgoïn; appointed director of the Pharmacie Centrale des Hôpitaux; M. Lafont, from the Trousseau Hospital, is sent to the Cochin, a new post; M. Grimbert is appointed to the Clinique, and M. Léger to the Trousseau Hospital.

SUBSCRIPTIONS TO THE PASTEUR INSTITUTE.—According to official data published on March 15, the total subscriptions received towards the proposed hospital amounted to 242,336f. On the same day a Bill was presented to the French Assembly by M. d'Aillières, appropriating 200,000f. to the same purpose. The public subscription was started less than a week ago. As the motion before the Assembly was unanimously

declared "urgent," the Bill will soon be on its passage. On Tuesday, March 16, the Academy of Medicine voted 10,000f. towards the fund.

DEATH OF DR. BOCHEFONTAINE.—This well-known physician died last week, aged 45. He was the manager of Dr. Vulpian's laboratory at the School of Medicine, and chief of the clinics at the Hôtel-Dieu. A decided opponent of Pasteur's theories, Dr. Bochefontaine, during the last cholera epidemic of 1884-85, swallowed pills containing choleraic dejections, to prove the harmlessness of the comma bacillus. For two days after this daring experiment he felt rather unwell, but on the third day, having fully recovered, he was very proud of his success. His untimely decease is attributed not to that, but to other experiments which he would persist in making upon his own person, instead of following the time-honoured custom of trying them upon his patients.

THE FRENCH DRUG AND CHEMICAL TRADE.

FROM the commercial statistics of French exports and imports during the year 1885 we find, among other details, a fair increase in the imports of gums (gommes pures exotiques), the figures being 5,608,250 kilos., against 4,808,753 kilos. in 1884. The advance in the exports of the same article is much larger, 4,184,818 kilos., against 2,853,730 kilos. Of sarsaparilla, 190,082 kilos. were imported in 1885, against only 87,750 kilos. in 1884. Jalap and licorice root likewise show an increase, the figures being respectively 12,429 kilos. and 1,634,894 kilos., against 10,974 kilos. and 969,671 kilos.

The business in cinchona barks shows an enormous shrinkage all round, the total import being 942,051 kilos., 2,031,754 kilos., and 2,812,064 kilos., and the export 322,666 kilos., 1,089,562 kilos., and 1,547,678 kilos., in 1885, 1884, and 1883 respectively. Although this country has not escaped the diminution of French custom in cinchona, yet the reduction in this quarter (602,109 kilos., 696,884 kilos., and 772,299 kilos. in 1885, 1884, and 1883 respectively) is as nothing compared to that of the native cinchona countries, from which it would appear that France is becoming more and more dependent on the London market for her bark supply.

Peru shipped to French ports 112,587 kilos. of bark in 1884, but only 24,401 kilos. in 1885, while the imports from New Granada fell from 1,262,328 kilos. in 1883 to 467,943 kilos. in 1884, and 127,738 kilos. in 1885. From countries non-specified (Java and British India?), the imports were 754,340 kilos. in 1884, and but 187,803 kilos. in 1885. It is also interesting to note that, while three years ago France shipped to this country almost as many kilos. of cinchona bark as she received from us, her exports to England had in 1885 dwindled down to 80,455 kilos. From Germany the Republic receives no bark, but her exports to that country rose from 131,522 kilos. in 1884 to 162,098 kilos. in 1885. According to the statistics before us, France has had no direct cinchona transactions with Holland.

Turning to acids, we find the French imports (in kilos.) in 1885 set down at: 712,385 for arsenious, 4,668,849 for hydrochloric, 311,063 for oleic, and 5,181,619 for sulphuric, against 816,320, 7,138,920, 370,357, and 6,496,400 respectively the year before, thus showing a decrease all round. Boric, oxalic, stearic, and tartaric show an increase, the figures (in kilos.) for 1885 and 1884 being respectively: 156,134 against 101,150, 569,684 against 500,325, 2,379,812 against 2,269,773, and 131,557 against 42,440. The exports of acids from France decreased sensibly all round as compared with 1884, oleic acid alone excepted, as will be seen from the following figures:—

				Kilos. in 1885	Kilos. in 1884
Oleic	acid	..	..	6,463,172	4,829,408
Stearic	"	..	..	2,873,486	3,179,762
Sulphuric	"	..	..	3,889,889	4,365,907
Tartaric	"	..	..	418,957	456,984
Gallie	"	..	..	6,410,293	7,768,723
Nitric	"	..	..	214,091	307,043

Of methyl alcohol the exports fell from 273,015 kilos. in 1884 to 163,408 kilos. in 1885. The exports of caustic potash to the United Kingdom increased by about 10 per cent. (5,281,809 kilos., against 4,723,302 kilos.), but those to Belgium fell from 9,868,866 kilos. in 1884 to 8,388,575 kilos. last year. France imported in 1885, 4,033 kilos. of sulphate of quinine, and 2,066 kilos. in 1884, but exported 17,362 kilos. in 1885, and 16,954 kilos. in 1884. Chemical products not specified are given in values, these being:—

	Francs in 1885	Francs in 1884	Francs in 1883
Imports	3,474,143	5,568,787	2,333,119
Exports	1,458,371	2,232,072	2,015,512

The following figures (in kilos.) refer to the movements in dye-stuffs:—

	1885	1884	1883
Cochineal imports	195,247	274,634	635,849
" " exports	162,810	312,553	395,483
Indigo imports	2,052,571	1,919,901	1,480,596
" " exports	670,480	648,244	566,508
Cutch and gambier imports ..	4,011,080	7,236,315	6,471,674
" " exports	1,348,377	1,142,957	790,633
Annatto imports	604,645	694,538	608,936
" " exports	505,304	490,135	552,395
Dyewood extracts imports ..			
" " exports	12,803,314	15,444,917	17,232,626

Foreign and Colonial.

BRITISH BURMA exported 128,270 cwt. of cutch in 1884-85, the value of which was 1,391,167 rupees.

UNEARNED INCREMENT.—Several hundred acres of natural colour—sienna—have been discovered, near Lewiston, Maine. Two years ago the land could have been bought for a dollar an acre, now it cannot be bought for any figure.—*India Rubber Journal*.

MEDICAL EXHIBITION IN BERLIN.—An exhibition is to be held in September in Berlin, at which it is intended to present a picture of the progress made in recent years in all departments of medical research. The sections will include physiology, pathology, anatomy and general pathology, pharmacology, dermatology, and syphilology, surgery, gynecology, ophthalmology, psychiatry, neurology, laryngology, together with military and sanitary affairs. The secretary of the exhibition is Dr. Lassar, 19 Karlstrasse, Berlin, N.W.

HARD ON CHICAGO.—In a case recently brought against Messrs. Fourand, Williams & Co., wholesale druggists, of Detroit, by the proprietors of the "California Golden Remedy," of Chicago, the following were the closing sentences of the address to the jury: "You, gentlemen, don't know what a Chicago patent medicine is. You have no idea of the evils and wickedness of Chicago medicine men. Why, gentlemen, when Peruvian bark was so high priced, one Chicago firm actually bought a carload of dried peas, sugar-coated them, and sold them for the best grade of quinine pills. Think of that, gentlemen, and bring in a verdict for the defendant in this case." Verdict for the Detroit firm.

THE SCALPERS VICTORIOUS.—A rather curious case was recently tried at Detroit. J. H. Jenks, proprietor of Kermott's Mandrake Pills, sold a large quantity to James E. Davis & Co., under an alleged verbal agreement that the trade price should be maintained. The latter firm offered the pills at 30 per cent. reduction, and advertised themselves as "wholesale agents." Jenks brought a suit, claiming that the verbal agreement had been violated, and that his business was much damaged by the reduction in price, inasmuch as the trade found they could purchase more cheaply from the so-called "wholesale agents" than of the actual manufacturer. Damages were laid at \$15,000, but after a trial of several days the jury found a verdict for the defendants, on the ground that it was the general custom for wholesale dealers to sign themselves "wholesale agents."—*Canadian Pharmaceutical Journal*.

RISKY CUSTOMERS.

BUSINESS, especially where credit is given, is surrounded with risk on every hand. Most of these, however, may be minimised by care. Our present object is to explain some of the most common risks incidental to retail trade, and to show how they can be avoided.

MARRIED WOMEN.

First, there are the risks involved in supplying goods on credit to married women. When a married woman is living with her husband, and apparently occupying her proper position in his household, she may be considered as his agent, having an implied authority to pledge his credit for the payment of accounts for such things as may from time to time become necessary for housekeeping purposes. But an authority which rests on implication may be rebutted by express evidence that no such authority has been granted, or, if granted, that it has been revoked. This is, perhaps, the most dangerous of all the risks which a retail trader has to run. A man supplies his wife with money for the purchase of necessities, and forbids her to get into debt; she disobeys his prohibition, runs up a bill, which when sent in is never seen by her husband; and, after long waiting, an action is commenced against the husband for recovery of the amount. The summons is paid for and served; the hearing fees are paid; the plaintiff loses a day in attending the court for the hearing, and then learns for the first time that the defendant had kept his wife plentifully supplied with cash for the purchase of all things necessary according to his position and means; and had forbidden her to exceed the amount allowed for household expenses, as he had a righteous horror of getting into debt, and never in his life bought anything which he could not pay for: at least so says the defendant on oath, and how is the victimised plaintiff to contradict him? It may be that this plausible story is true; or it is quite as likely to be false; but either way the result is the same. Unless the plaintiff has some evidence in support of his legal right to recover from the defendant, he will be nonsuited.

Let us, therefore, see what evidence will avail a plaintiff when such a defence is raised. The most common, because more easily capable of proof than any other, is evidence to the effect that the husband has had knowledge of the fact that his wife was in the habit of incurring debts to the plaintiff. This might be shown if he had previously paid a bill for goods sold to his wife, and had not given notice to the plaintiff not to trust her further. In some cases, even though the fact be so, it may be difficult to prove. When husband and wife play this game in collusion, they are generally careful to keep their own counsel, and to leave no trace which the plaintiff can get hold of; but it occasionally happens that a former payment has been made by cheque, or that the defendant has accompanied his wife to the shop when some part of the debt was incurred, or he may even have incurred part of it himself, and directed the price of an insignificant article to be put down to the account, thus recognising the existence of a current account; and, this being admitted, it is comparatively immaterial whether he knew of the extent to which it had grown. When an agent is authorised to purchase goods on credit, without any express notice to the creditor as to the sum which is to be the limit of the account, the principal debtor (in this case the husband) is held responsible for the whole amount; and justly so, for it is impossible to know the precise instructions given to the agent, and it is sufficient to know that the course of dealing has been authorised by her husband, and that no notice of withdrawal has been given.

In such cases, if the husband succeeds at the trial, the debt may generally be written off as bad; but it sometimes happens that the wife is possessed of separate estate, and the creditor may succeed in getting a verdict against her, and taking part of her property in execution if she will not pay according to the order of the Court. This, however, is not a very common case, for generally the women who get into debt recklessly are those who have no separate estate to fall back upon, and of course it would be a waste of money to sue a woman in such circumstances. The Married Women's Property Act, 1882, provides that every contract entered into

by a married woman shall be deemed to be a contract entered into by her with respect to, and to bind, her separate estate, unless the contrary be shown. This is one of the sections of that Act which define and add to the responsibility of married women who are possessed of separate property; and, although *prima facie* the purchase of necessities for the household would be taken to be an act of agency for the husband, yet, when the contrary is proved, it would be difficult to prove that the wife who had exceeded the allowance given by her husband had not done so on account of her separate estate.

Still, there may be cases in which the plaintiff would fail even here. The action could not succeed if the the contrary were shown—that is to say, that she did not intend to bind her separate estate, and did not enter into the contract on account thereof; and in many cases something would have been said (little noticed at the time), which, either expressly or by necessary implication, showed that she intended to pledge her husband's credit and not her own. In such a case the unfortunate creditor would fall between two stools and lose his money.

One great obstacle to the suppression of this evil is the impossibility of asking a husband whether his wife is authorised to act as his agent for the purpose in question. A tradesman who did so would soon clear his shop of married ladies, and their active tongues would have the effect of diminishing his receipts in other ways.

Another class of cases is almost equally difficult to deal with, and, being rather more out of the ordinary course of business, ought to be avoided, except when there is some special reason for incurring the risk. We refer to cases in which the husband neglects or refuses to provide for the reasonable wants of his wife, and leaves her to starve unless she can get her wants supplied by those who are willing to take their chance of getting paid by her husband. If he has turned her out of doors without any just cause, he can generally be compelled to pay for absolute necessities supplied to her. But who is to determine the merits of a quarrel between husband and wife—especially after hearing only one side of the story? Therefore, except from motives of charity, it is prudent to avoid any dealings with a deserted or expelled wife unless she can pay ready money for what she may require.

It is probably known to most of our readers that a wife may cease to have any pecuniary claim upon her husband in several ways. Thus, the commission of a matrimonial offence is an absolute defence to an action against a husband for goods supplied to the wife after the discovery of her criminality. But there are also other cases in which he would be equally free from responsibility. If a married woman, without sufficient reason for doing so, should leave her husband's home, and refuse to return to it, she would have no claim to an allowance for her separate maintenance, nor could he be compelled to pay any debts incurred by her during her unauthorised absence. There may be circumstances in which a wife would be justified in leaving the home of her husband—such as wanton cruelty, the introduction of a concubine into the house, &c.; but in all such cases it is very difficult, and often impossible, to get at the facts, and therefore prudence warns us not to interfere.

MINORS.

With respect to minors, there are some risks which do not appear to be generally understood. A minor living with his parents is not capable of binding his father by his contracts, unless he has had a special authority to enter into any contract on his behalf. And in this case, more strict proof of agency would generally be required than in the case of a wife; for it might be that the goods were for the minor's own use. When a parent is in the habit of sending his son to a certain shop, the same rule as already enunciated would apply: the agency being indisputable, its extent could not be inquired into; if the agent took unfair advantage of his position, his principal would have to suffer, and not the person with whom the business had been done; for how could he discriminate between authorised and unauthorised acts of an admitted agent? But in the case of necessities supplied to an infant, another question may arise. The responsibility of a minor for the price of necessities supplied to him during his infancy may be enforced against himself when he attains the age of twenty-one years. In any such action,

it would be necessary to prove that the articles were necessary and suitable for the position of the youth; and as it is often difficult to prove this, especially in the case of a son living at home with his parents, who are supposed to supply all his reasonable wants, it is better to avoid the risk. There is not so much need of delicacy in inquiring as to the authority of a minor to pledge the credit of his parent as is requisite in the case of a wife. It is easy to ask a father whether he will pay for what his son orders; while the same question addressed to a husband respecting his wife would be an unpardonable offence.

SERVANTS.

Servants sometimes abuse their position in order to get goods for themselves in the names of their masters. The same principles apply in a modified degree to these cases as to those which have been already considered. A servant can only be safely served as the agent of the employer, and this agency may be proved by the usual course of business, and by the recognition of the responsibility on the part of the master on previous occasions. If there be any cause for suspicion, the master might be asked if the goods supplied were really for him; but there ought to be definite cause for suspicion before this course is resorted to. Or the account may be sent in at more frequent intervals if there should be any reason to suppose that there was anything wrong. Generally, however, if a master pays one bill for goods supplied to his order through his servant, he will be responsible for whatever that servant may obtain in his name while still employed by him. The greatest danger in this respect is that a servant may obtain goods after leaving her situation and have them entered in the name of her late master; when he would not be responsible. This case occurs frequently, and can only be guarded against by vigilance.

FALSE PRETENCES.

Obtaining goods by false pretences is an extensive subject, as the modes of accomplishing it are very various. We must, however, be content to touch upon it very briefly. Essential ingredients in this crime are the fraudulent misrepresentation of an existing fact in order to obtain possession of the goods, and the delivery of such goods by the tradesman on the faith of such representation being true. A promise of payment (even if there should be no intention to pay) is not a legal false pretence; for how can the state of mind of the promiser be proved? And, on the other hand, no amount of ruse will constitute the offence if the goods were supplied before such exaggerated statements were made. After the goods are supplied, the purchaser may say what he pleases, and he will be outside the limits of this offence. But if a person should go to a shop and ask for goods on credit on the representation that he has come into possession of an estate, of which the rents were not yet payable, and the trader, believing him, supplied what he asked for; then, on proof that no such estate was in existence as the property of the alleged owner, the offence would be complete; and the same rule would apply to one who professed to be waiting for a legacy which would be payable in a short time, if no such legacy had been bequeathed, or if the testator were still living and therefore capable of revoking his will. These are only intended as specimens of the way in which a legal false pretence may be made, as it is often desirable to decide on the instant whether a transaction is within the law or not. A mistake in making a criminal charge is often productive of serious consequences, and the temptation to give a rogue into custody or to bring a criminal charge against him is one which is difficult to resist in the moment of discovery. A remarkable mode of getting consumable articles by false pretences is that of going into a shop, asking for what is desired (say a bottle of seltzer), drinking it, and then having no money to pay for it. This offence is not altogether unknown to chemists, though restaurateurs are more frequent victims; and, although it has been practised for many years, there is, unfortunately, a doubt as to the law on the subject. Many persons after being victimised in this way content themselves with expelling the offender, rather than throw good money after bad by prosecuting him; and, even when there is a prosecution, the magistrates do not always take the same view as to what the law really is. Thus one magistrate will tell the complainant that his remedy is by an action in the County Court, while another will

convict the offender, and inflict upon him a short term of imprisonment, on the ground that his asking (as a stranger) to be supplied with what he wished for implied a representation that he had the money in his pocket to pay for it. There has been no authoritative decision binding upon all magistrates, but we fear that those who have taken upon themselves to convict have allowed their sense of right to obscure their knowledge of the law.

WORTHLESS CHEQUES.

Another mode of working which often leads to doubt as to the propriety of a prosecution is that of giving worthless cheques. The difficulty in this case is very great, and the consequences of a mistake might be very serious. It is not enough that a cheque which has been received for goods supplied in exchange for it is returned, marked by the bankers on whom it was drawn with the words "not sufficient." In many such cases the overdraft may have been the consequence of inadvertence; but when a man having no banking account regularly draws cheques and obtains goods for them he is unquestionably a criminal, for his conduct cannot be explained on the supposition of his having made a mistake. Here it must be borne in mind that there is a great distinction between paying a bill with a worthless cheque and purchasing goods therewith. In the one case the matter remains as it was—there is a bad debt upon the books which has neither been added to nor diminished by the worthless cheque. In the other case valuable goods have been fraudulently obtained in exchange for a worthless piece of paper, which is a criminal offence.

THE SALE OF FOOD AND DRUGS ACT.

The risks which we have already noticed are in some degree common to all trades. There are a few which more especially affect the trade of a chemist and druggist. The Sale of Food and Drugs Acts is too well known to require full explanation here, but the mistake so often made by vendors ought to be mentioned. When an inspector purchases an article for the purpose of having its quality tested, he is bound to divide it into three portions, one of which must be given to the person from whom it was bought. This provision was intended for the protection of the tradesman; and yet vendors frequently refuse to receive the portion tendered to them. This is a great mistake: the possession of the one-third of the article actually sold is valuable, as it enables the evidence for the prosecution to be checked, and corrected if necessary. Another sample taken from the bulk in the absence of the inspector would not answer the same purpose, for it would not be receivable in evidence.

POISONS.

The restrictions affecting the sale of poisons are so well known that we need only mention them as being within the scope of our present subject. Doubtless all our readers are duly impressed with the importance of strictly observing the law in this respect.

EXPLOSIVES.

We have on previous occasions devoted some attention to the very stringent laws affecting the sale of explosive substances, and of substances which may be used in the manufacture of explosives; and will now only repeat the caution which we have given elsewhere, that is to say, that such articles as nitric acid, sulphuric acid, glycerine, saltpetre, nitrate of sodium, chlorates (especially chlorate of potash), picrates, picric acid, phosphorus, iodine, metallic mercury, &c., must be sold carefully, lest the purchaser should make felonious use thereof, and the innocent seller should be deemed to be an accessory before the fact, and so liable to the same punishment as the principal. A stranger ought not to be supplied with such articles.

VARIOUS.

The sale of spirits, of medicines which ought to bear the patent medicine stamp and do not, and infringements of the Apothecaries Act, are topics which have been fully discussed in this journal again and again, and could not be properly treated in this article. Finally, we only mention, without enlarging on the subject, the possibility of a criminal prosecution and severe punishment for any participation with women in the crime of abortion.

PHARMACY IN CEYLON.

THE style of business out here is much the same as a country business at home: we are "chemists and druggists and general dealers," though in some stores the chemist's department forms only a small part of the business.

We do not get very remunerative prices—Eño's salts, 2 rupees; Clarke's blood mixture, 2 rupees; Cockle's pills, 2s. 9d. size, 2 rupees; 6-oz. ordinary mixtures, 1 rupee; 8-oz. 1½ rupee. The rupee being so low in value—under 1s. 6d. sterling—the prices are much the same as one has been accustomed to in England.

Our expenses in importing home goods are very heavy: we have a 6-per-cent. *ad valorem* duty on goods coming into the colony, which, in addition to agents' buying commission, shipping, landing, and railway charges, and other incidentals, together with 33½ per cent. premium, which we have to pay in exchanging rupees into sterling, causes an advance on many goods of 50 to 60 per cent. over London invoice prices.

We are in the land of "spicy breezes": we do not wish to detract from the island, but cannot help thinking there has been a mistake somewhere: certainly we get breezes—incidental to a hot climate, we suppose—the spice in them being rather conspicuous by its absence.

Our beautiful scenery and foliage is always admired by passengers taking a trip into the interior. Indian visitors, who have been accustomed to the hot and parched plains, say the visit to Ceylon is a glorious change for them, and admire very much the luxuriant growth of vegetation for which our island is so famed.

Our climate is like a perpetual summer: the year is marked, not by four seasons as at home, but by the two monsoons, the one from the north-east, which comes in about October, lasting till the following April, when the south-west comes and stays till the next October. The burst of the monsoons is accompanied by plenty of stormy weather, when we get thunder and lightning, and rain in torrents.

We have several botanical gardens in Ceylon; those at Peradeniya are especially good. I will send you a little paper on what I see there at a future date.

I met Dr. Bonavia, Brigade-Surgeon of the Indian Medical Department, a little while ago. He has been carrying on a research into the properties of the orange family, and told me of the excellent results he has observed from the use of "Decoction of Lemon." As it may interest some of your readers, I give the recipe for the preparation of the medicine in full, copied from a letter by Dr. Bonavia to the *Ceylon Observer*:—

"To make decoction of lemon, take one Malta lemon, or three sour limes, cut into thin slices, rind, pulp and all, add three breakfast-cupfuls of water, and boil in an enamelled saucepan until the liquid is reduced to one cupful, then leave it exposed all night to the air; next morning strain through muslin, and drink the liquid early on an empty stomach."

Dr. Bonavia adds: "In quotidian fever simply, decoction of lemon given only once a day acts like cinchona febrifuge. In enlarged spleen of recent occurrence (within few months) the decoction has a wonderful effect. In loss of appetite and weakness after illness, decoction of lemon may be prescribed with marked benefit."

The wholesale houses at home seem very anxious to do business with their colonial customers direct. We get hosts of price-lists by every mail, and occasionally a traveller from the old country drops in.

"Siegel's Syrup" people have been sending their almanacs through the post to almost every person in Ceylon, and within a few days after the arrival of these almanacs all the stores had run out of stock. By the time new stocks arrive it may possibly happen that the interest of the patent-medicine-taking public will be taken up with something else.

I notice you are altering the publication of THE CHEMIST AND DRUGGIST to once a fortnight, and no extra charge to subscribers—another instance of the liberal spirit you have always shown to us; a year's numbers and the Diary, all post-free for ten shillings—marvellously cheap. May you continue to go on and prosper!

CINNAMON.

SANDAL-WOOD.

FRAGRANT odours are not often centred in the woody fibre of plants, but are more generally confined to the bark, leaves, and flowers. There are, however, some few woods which have an aromatic odour, such as the myall and musk woods of Australia, the cedar, camphor, and especially the sandal-wood. A few details about the latter may be interesting:—There are more than a dozen species of the genus, which are chiefly restricted to Asia, Australia, and Oceania. The Indian species are *Santalum album* and *S. myrtifolium*. The Australian species are *S. cygnum*, *S. lanceolatum*, *S. oblongatum*, *S. obtusifolium*, *S. ovatum*, and *S. venosum*. The species found in the Pacific islands are *S. Austro-Caledonium*, Viell, which is superior to that of most other countries, owing to the strength and fineness of its odour: *S. ellipticum*, *S. Freycinetianum*, *S. paniculatum*, and *S. lase*. But many of the species are not well determined, nor their localities clearly defined.

Santalum album, one of the Indian species, has long furnished the chief supply of wood, which is shipped from the Madras Presidency. In Mysore the sandal-wood trees form a Government monopoly, bringing in a revenue of about 40,000l., the wood selling there at 35l. to 40l. a ton.

S. Freycinetianum is imported from Cochin China and the Pacific islands, but it is less esteemed, the colour of the wood being paler, and the odour less pronounced.

It is only the central portion of the tree which produces the scented yellow wood constituting the sandal-wood of commerce. The quality of the wood depends on the quantity of the oil contained in it, as indicated by the smell when freshly cut or burnt. The old trees produce the best, and of them that part of the wood near the root is the most prized. The distillation of oil from the roots in India is carried on chiefly at Mangalore. Five cwt. of wood yield about 80 lbs. of pure oil, thus giving a profit of nearly 37 per cent.

At one time the sandal-wood tree was plentiful in Mauboom, but is now practically extinct, and the same might be expected of the Mysore forests, were it not for the fact that they are under State conservancy. At the best, however, the work of destruction proceeds apace, and it will require careful watch of the authorities to prevent extinction.

The present average annual output in the native State of Mysore is computed at 1,000 tons of heart-wood, yielding an income of about 40,000l., and considering that all exterior parts of the sandal-wood tree are inodorous, the destruction of this comparatively small forest plant must be something enormous to produce the quantity of wood mentioned.

The essential oil is used as the basis of nearly all ottoes manufactured in the country.

The wood is made into boxes, in which steel does not rust; curiously carved cases, fans, and other fancy articles; and it is also burnt in the temples.

The Mysore wood is divided into five classes. The first three go almost exclusively to China: the hollow fillets and the small broken pieces, which are not included in the five classes, going to Arabia, where they are either burnt whole, for the sake of the fragrant smell afforded, or ground up and used with other ingredients as incense. Of that sent to Surat the inferior descriptions of billets are burnt by the Parsees in their fire temples, and are also used at Hindoo funerals when the friends of the deceased are able to afford it. The wood, rubbed down with water and worked into a paste, is used by all Hindoos in their caste marks, and is also employed as an external application for headaches and some skin diseases. The powder of the roots and of the heart-wood is used by the Chinese against gonorrhœa, and is applied to wounds. They also consider it carminative, stomachic, and stimulant. The oil, which is yellow and of the consistency of castor oil, is much esteemed for its odour.

As opium ministers to the sensual gratification of the Chinese and others of the same class, so sandal-wood ministers to their superstition. Without it no religious ceremony can be conducted, and its absence is a mark of poverty, so that the Oriental of India and China will sacrifice anything rather than allow that, on the proper occasion, sandal-wood should not be burnt. The roots, which are richest in oil, and the chips go to the still, while Hindoos who can afford it show

their wealth and respect for their departed relatives by adding sticks of sandal-wood to the funeral pile. A very large quantity was used up in this way at the cremation of the late Maharaja of Mysore; and also, in 1874, at that of the Hon. Narajah Wassodeo, Minister of the Legislative Council of Bombay.

DOMESTIC REMEDIES OF THE ARABIAN DESERT.

DR. E. GORDON HULL, in the *British Medical Journal*, gives some particulars of observations on the diseases and remedies current among the Bedawin of Arabia Petrea and the Arabah Valley, made during the autumn and winter of 1883-84, while he was acting as honorary medical officer to an expedition sent out by the Palestine Exploration Fund. He remarks that chronic bronchitis and chronic articular rheumatism are almost universal. He measured twenty-six men and nearly all their shoulder-joints creaked and groaned as they raised them. This will account for the curious inability of the Arabs to move about, or do any work in the morning before they are "thawed" and rendered supple either by fire or by sun. Nevertheless, the Arabs appear to be a very healthy people.

The remedies they are in the habit of using are not many in number, and are usually derived from those plants which are most widely distributed. As a diuretic, that is, for pains in the back and gravel, they use the retem, or broom (*Spartium monospernum*), making a decoction of the top shoots in hot water, and drinking it; they say it is also purgative. This shrub, which provides them with fuel, and their camels with a scanty nourishment, is almost universal; we saw it in flower on the way to Petra, and the inflorescence, which is purple and white, gives out an exceedingly sweet perfume. It has a very bitter taste.

Several species of wild melon, of the family *Bryonia*, allied to the elaterium (which also grows in these parts), are in common use as purgatives; the native method of using them is ingenious. A fruit is split into halves, the seeds scooped out, and the two cavities filled with milk; after allowing it to stand for some time, the liquid, which has absorbed some of the active principle of the plant, is drunk off. A milder remedy is camel's milk, which appears under some circumstances to be purgative to the Arabs.

The order *Compositæ* furnishes several medicinal herbs of which the Arabs make use. The *Santolina fragrantissima*, a graceful plant of a sage-green colour, bitter taste, and strong fragrant odour, furnishes them, in the form of an infusion, with a carminative, good for colic and all painful affections of the abdomen. In the bazaars of Cairo the fragrant dried heads are sold for the same purposes as camomile. I was told that there are no snakes in the districts where the plant grows, and the natives believe that the odour of the plant is sufficient to drive reptiles from a house, and it is used for this purpose in Cairo and other towns.

Another plant of the same order is an artemisia, or wormwood, with a very strong aromatic odour and bitter taste. The fellaheen use it to put in their bedding to drive away vermin. This use of the plant appears to be very universally known, witness the old English rhyme—

When wormwood hath seed, get a handful or twain,
To save against March, to make flea to refrain:
Where chamber is swept, and wormwood is strewn,
No flea for his life, dare bide, or be known!

From the seeds of some of the kinds of artemisia, which grow in these parts, santoline appears to be obtained. In the wilderness of Judea, near to Beersheba, we found a pretty little calendula, or marigold, very common. It became extremely abundant along the Mediterranean seaboard, and is used by the natives as a sort of tea for flatulence and pain in the abdomen. Knowing how largely a liniment derived from this plant was advertised by homœopaths, I tried to find out if they used it as an external application, but they did not know of its virtues as such. One of the commonest desert plants is the zygophyllum, so called from the leaves being composed of short succulent jointed segments; these, bruised in water, form a mucilaginous liquid of which the Arabs are very fond as an application for sore eyes. It has an exceedingly nauseous taste, but this fact

only appears to commend it to the notice of the camel, who devours it greedily. A curious tropical plant, which we found in the Ghor, at the south end of the Dead Sea, is the osher (*Callotropis gigantea*), a large tree-like asclepiad, containing simply enormous quantities of milky acrid juice. Its properties are stated by Endlicher to be powerfully purgative and emetic; but the natives use it to give to women whose milk is scanty, probably in accordance with the doctrine of signatories. Here, also, grows the castor-oil plant, but its virtues are unknown to the natives. A very striking plant, which, perhaps, I should have mentioned before, and which often hangs in graceful dark-green festoons from the granite walls of the gorges of Arabia Petrea, is the caper plant (*Capparis spinosa*). The natives are very fond of the fruit, which has a warm aromatic taste, and they stroke the region of the epigastrium appreciatively after eating one or two. The cortex of the root is said to be aperient and diuretic. Another fairly-common plant is a hyoscyamus, called by the natives "sekharan," with fleshy leaves and purple flowers. The dried leaves are used by the natives to smoke, and produce a kind of intoxication or delirium; and an infusion of the fresh leaves possesses strong narcotic properties. It is nearly allied to the mandragora, which becomes common on the limestone downs in the South of Judea. The Arabs are extraordinarily susceptible to narcotics. Our tobacco they could not smoke at all; a few whiffs make them giddy, and give them a headache; even a "Richmond Gem" cigarette is too much for them. Only two mineral substances appear to be regarded by the Bedawin as medicinal. One of them, sulphur, I have already mentioned; the other is a kind of common red coral, found on the shores of the Red Sea and Mediterranean, and sold in the bazaar at Gaza. As far as I could gather, they only use this as a charm.

Bacillopathy.

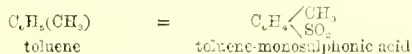
[A German chemist professes to have found out that the bacilli of one disease prey upon and exterminate those of another. It is proposed to base a system of medicine upon this discovery.]

WHEN I was young the surgeon's knife Was Science's most trite specific For every ill of which my life Was all too apt to be prolific. They bled for all my childish woes— In fact, there was no end of bleeding; And leeches in appalling rows Meantime upon poor me were feeding.	But now the paths of progress end: In future no disease should kill us, For Science promises to send As antidote the right bacillus.
Allopathy's benignant rule, That, of a surety, more exact is, Kept guard upon me while at school, And soon drove out the older practice.	Each illness that is known to man Is due to a specific creature; And scientific persons can Describe to us its form and fea- ture.
A course of powders or of pills, Of senna, or of mustard plasters, Diversified with salts and squills, Protected youth from all dis- asters.	These creatures, like the poet's fleas, Have enemies prepared to bite 'em, And, so the doctors tell us, these Have other foes, <i>ad infinitum</i> .
Then homœopathy became The power on which I placed re- liance:	Henceforth our course is very plain: A lesser ill must slay a greater; And that, established, must again Be slain by something millor later.
It always was my honest aim To keep abreast of modern science.	For instance, when a fever's high, You may replace it with bron- chitis,
What nobler man than he who treats All sickness, slight as well as graver, With pretty microscopic sweets And tinctures quite devoid of flavour!	And (if you do not haply die) Go next to simple laryngitis.
And still the art of curing ills Had not yet reached its limita- tions;	From that a change to croup or gout Would be induced by the phy- sician;
It did not halt at rhubarb pills; It did not stop at triturations.	And thence to measles, nicely out, Would be the obvious tran- sition.
	A trifling illness thus assured By means of many permuta- tions, The patient might at length be cured By allopathic medications.

—*St. James's Gazette.*

SACCHARINE: A SWEETENING AGENT DERIVED FROM COAL-TAR.

At a meeting of the Manchester section of the Society of Chemical Industry, held on February 2, Mr. Ivan Levenstein read a paper on this singular substance, discovered by Mr. C. Fahlberg, a German chemist residing in the United States. Saccharine is obtained by converting *toluene* from coal-tar into its two monosulphonic acids



By treating the latter with phosphorus-pentachloride (PCl_5) there is formed $\text{C}_6\text{H}_4 \begin{array}{c} \text{CH}_3 \\ \diagup \quad \diagdown \\ \text{SO}_2\text{Cl} \end{array}$ toluene-sulphonic chloride in two forms, viz., the para and the ortho. The latter is liquid, and is suitable for the production of saccharine, which is effected by the introduction of the amide group of ammonia; the ortho compound is thus converted into *orthotoluene sulphamide*, $\text{C}_6\text{H}_4 \begin{array}{c} \text{CH}_3 \\ \diagup \quad \diagdown \\ \text{SO}_2\text{NH}_2 \end{array}$, and this by oxidation yields saccharine or benzoyl sulphonic-imide, $\text{C}_6\text{H}_4 \begin{array}{c} \text{CO} \\ \diagup \quad \diagdown \\ \text{SO} \end{array} \text{NH}$.

Saccharine presents the appearance of a white powder, and crystallises from its aqueous solution in thick short prisms, which are with difficulty soluble in cold water, but more easily in warm. Alcohol, ether, glucose, glycerol, &c., are good solvents of saccharine. It melts at 200°C ., with partial decomposition; its taste in solution is intensely sweet, so much so that 1 part will give a very sweet taste to 10,000 parts of water. Saccharine forms salts, all of which possess a powerfully sweet taste. It is about 230 times sweeter than the best cane or beetroot sugar. The use of saccharine will be not merely as a probable substitute for sugar, but it may even be applied to medicinal purposes where sugar is not permissible. The inventor was fully aware that, in order to supply a perfect substitute for cane or beetroot sugar, something else was needed for confectionery and similar purposes besides sweetening properties, and he has endeavoured to solve this problem. Fahlberg combines glucose, or starch sugar, with saccharine, and thus obtains a compound which he calls "dextro-saccharine," which, as far as the taste is concerned, is scarcely distinguishable from the best sugar. The quantity of "saccharine" used is in the proportion of 1 part to from 1,000 to 2,000 parts of glucose.

The price of saccharine is at present about 50s. per lb., and even at this price such a mixture would be very considerably cheaper than real sugar; but there is great likelihood of the process of manufacture of saccharine being considerably cheapened.

There is a probability that saccharine will be useful in pharmacy; many patients complain of the unpleasantly viscous nature of syrups—an unpleasantness which saccharine will not convey. Mr. Levenstein indicated probable uses for it in the specimens which he showed, which comprised some liquors sweetened with saccharine, lozenges made from "dextro-saccharine," raspberry syrup sweetened with saccharine, and a small bottle of quinine, the bitter taste of which was disguised by the addition of a small quantity of saccharine. The substance is worth trial by pharmacists.

At a meeting of the Manchester Medical Society (*Brit. Med. Journ.*, March 13, 1886) Dr. Dreschfeld described the therapeutic properties of this substance. When given internally, or subcutaneously, it is exuded completely by the urine in an unaltered state; it is, therefore, not decomposed in the body. Neither the saliva nor the faeces contain any traces, even after large doses. It has scarcely any retarding effect on the digestion of either proteids or hydrocarbons; in fact, given in small quantities, it increases the diastatic action of malt in the presence of sugar. It has no injurious effect if given even in large quantities (30 to 80 grains) in man, and produces no appreciable alteration in the appetite. Saccharine is slightly antiseptic. Beyond being a substitute for sugar, it possesses no therapeutic properties, except that, in two cases of acid dyspepsia, it relieved some of the troublesome symptoms. Its use is indicated in diabetes and obesity. In diabetic patients it has no effect either on the quantity of urine or on the amount of sugar passed.

THE COCHINEAL INDUSTRY IN GUATEMALA.

THE following paragraphs describing a visit to a cochineal range in Guatemala are taken from the *Montreal Daily Star*—

"In this queer country the raising of hemipterous insects of the bark-louse family—especially the *coccus cacti* or Spanish cochinilla—is a profitable if not a pleasant industry. In this portion of Guatemala vast plantations are given up entirely to the cultivation of the 'Indian fig,' or nopal, of the genus *Cacti* (*Opuntia cochinitifera*), upon which these bark-lice feed.

"Senor Espanosa's plantation of *Opuntia cochinitifera*, which was the one we visited, includes nearly a thousand acres, and the *modus operandi* of cultivating the insect is most curious. They require about the same care that is ordinarily bestowed upon silkworms, and the occupation is not more disagreeable among crawling bugs than wriggling worms. Immediately before the annual time of violent rains great branches of the nopal, covered with insects, are cut off and stored in a building erected for the purpose, to protect them from the weather. At the close of the wet season, four or five months later—about the middle of October—the plantations are again stocked from these supplies, by suspending little nests made of henequin, maguey, jute, or any sort of woody fibre upon the spines of the growing cacti, each nest containing about a dozen females. Warned by the tropic sun, the insects soon emerge from their semi-comatose condition, and begin to lay eggs with marvellous rapidity, each female producing more than a thousand young. These spread over the plants with marvellous celerity, the young females attaching themselves to the leaves and immediately swelling to incredible size, adhering so closely to the nopal as to become almost a part of it, resembling vegetable excrescences rather than animated creatures.

"In this condition they are gathered for cochineal, none but the pregnant females being valuable for commercial purposes. The males are comparatively few in number—not more than one to two hundred and fifty females—and are of no use for colouring purposes, but, as in the higher orders of existence, escape most of the pains and perils of life. While the males are thus left to disport themselves undisturbed the females are picked off with a blunt knife, collected into baskets and killed by dipping them into boiling water, or baking them in a heated oven, or on plates of hot iron. The first crop is gathered about the middle of December, and subsequently several more of as many successive generations—the last for the year being in May. These tiny insects, of the family Coccidae, are in the form of rounded scales, the body covered with deep transverse wrinkles, abdomen of dark mulberry colour, with short black legs, and bristly on the posterior part. The male has two erect wings, the female none.

"A labourer of ordinary skill can pick off only about two ounces of cochineal bugs in a day. These lose at least two-thirds of their weight in the process of drying. As it requires no less than seventy thousand insects to weigh a pound, and the average retail price of cochineal is only sixty cents per pound, it may be inferred that the business is by no means a sinecure. By the method of immersing the insects in boiling water they turn to a reddish-brown hue, losing much of the white powder with which the wrinkles of their bodies are loaded. When dried in an oven they retain this, and then their colour is grey, and when killed on hot iron they become black. This is the cause of the varieties known in the market as 'silver grains,' 'black grains,' and 'foxy,' the latter (killed by the first plan) being preferred. When dried, the cochineal presents the form of convex grains, each about an eighth of an inch in diameter, with the transverse wrinkles still visible.

"An inferior quality of insect, called *sylvestre*, which is indigenous to a wild species of cactus, is frequently gathered and sold for the better variety, and sometimes the species become mixed without design on the part of the planter. Occasionally a bug distemper breaks out and devastates entire plantations, as in Guatemala a few years ago, when the haciendados were obliged to clean out the old stock, root and branch, and begin anew. The *coccus cacti* are also fed upon by birds, mice, and larvae—the latter destroyers sucking out their bodies and leaving only the empty skins."

IPECACUANHA WHINE.

On! call me not a love-sick fool,
Dismiss me not with curses;
If you have loved, read on and you'll
Appreciate these verses.
Ah, love!—my reader, dost thou know
The meaning of the passion?
And say, oh, say, if that is so,
O'ye feel it in this fashion?

Just do you pine from day to day,
And visibly get thinner?
Does Cupid seem to take away
Your appetite for dinner?
And do you live as in a dream,
Oblivious of duty?
Does life itself a chasm seem,
Without that thing of beauty?

And is the lady of your love
A sylph-like, blue-eyed Peri?
And do you call her "Turtle-dove,"
Or "Ducky darling"? Query.
And does she stammer when her eyes
Meet yours, and tell-tale blushes
Suffuse her cheeks? Oh, say, likewise,
Have you respondent flushes?

Say, if you got a wisp of hair,
A glove, or faded flower,
Would you to solitude repair,
And hug it by the hour?
Speak out, and say if that is so:
Hast felt the pow'r magnetic?
Do tell—because I want to know
If you are sympathetic.

For nights and nights I couldn't sleep
When I had seen her vision
Within the chemist's shop I keep,
Out in the West division.
How prettily she pursed her lip,
And asked in artless manner
If I sold lozenges of Ip—
Ip—Ipecacuanha!

I never shall forget that day,
Not if I reach a hundred;
And if you'd seen her face you'd say
It wasn't to be wondered.
For, oh, those orbs of limpid blue!
That nez céleste au ciel!
Those lips "too utter," quite "too too"!—
'Twas they that played the de'il.

I sighed (the proper thing to do
To get an inspiration);
I sighed again, and she sighed too—
Oh, sweet reciprocation!
—"Adieu, I'll come again some day,"
She said in accents winning.
A voice within me seemed to say,
"That's not a bad beginning."

Our suit progressed, we often met;
Just weren't we spoony—rather.
She whispered "Yes," IF I could get
The starboard side of father.
That "IF" meant volumes; and, in truth,
The course of love—confound it!—
It never, somehow, will run smooth,
As doubtless you have found it.

Her parent was a captain, who
Had done a trade with Indy
(I'm glad I wasn't of his crew,
Or there'd ha' been a shindy).
But now he'd cut those Eastern shores
For suburbs occidental,
And patronised those beastly stores,
To trade so detrimental.

I made a speech, and asked consent,
In neatly studied phrases;
He asked me what the deuce I meant,
And bade me go to blazes.
We had a row, the captain swore,
My conduct I defended;
He promptly kicked me through the door,
And thus the matter ended.

I wandered home with aching heart,
A wiser man, and sadder.
Oh, woe! thought I, I've got her "*carte*,"
There's comfort in her shadow.
I'll gaze upon that peerless face
In loving admiration!
This bit of card shall take *her* place,
And yield me consolation!

"We" sat one day in solitude,
Her *carte* and I together.
Days after I had interviewed
The captain's upper leather.
Methought I saw a form draw nigh
(My loved one or her double!)
'Twas she! a teardrop in her eye,
Her face was full of trouble.

She sobbed, "Poor pa has got the gout,
His foot is swelled prodigious;
It racks my nerves to hear him shout,
His talk is sacrilegious.
Oh! can't you make a mixture," said
My animated photo,
"To stop his tongue, and clear his head,
And put him right *in toe-toe*?"

Next day the Captain sent for me,
And said I'd been his saviour,
And amply made apology
For all his rough behaviour.
No doubt he'd acted for the best,
Though rather in a hurry;
I tried to set his mind at rest,
And begged him not to worry.

He said, "Young man, I'll tell you what
Amounts to a confession:
My irritable temper got
The best of my discretion;
When, in unthinking rage, my toe
Came into operation,
And caused *me* agonies of woe,
And *you* humiliation,

"My gouty foot got twisted bad,
My sufferings were terrific,
The Store stuff drove me raving mad,
Then came your grand specific!
The first dose quickly gave relief
As it went down my throttle;
'TIS WORTH AT LEAST (in my belief)
A HUNDRED POUNDS A BOTTLE.

"And now, my boy, I'll touch upon
Another 'tender' quarter:
Unless your love has undergone
A change towards my daughter,
Consent no longer I withhold,
So take her and be happy,
And let our friends be duly told
The wedding's on the 'tappy.'"

The sun shone on our wedding day;
The guests who'd been invited
Enjoyed the feast, and pegged away
As if they were delighted;
Each drank (with bumper to his lip)
Our "health" in splendid manner,
Then cheered, "Hip, hip, hurrah! Ip—Ip—
Ip—Ipecacuanha!"



SAVORY & MOORE'S MEAT PEPTONE AND PEPTONISING PELLETS.

THE preparations sent out by this firm have always had the stamp of genuine merit and an established reputation; those now before us are both old and new. The meat peptone has been made by the firm for fourteen years; it contains the fibrin and albumen, as well as the extractive, of English beef, in a peptonised condition, and the makers have succeeded in getting rid of the objectionable flavour and gluey consistence which such peptones are very apt to acquire. This peptone dissolves in water speedily; it forms a pleasant and highly nourishing soup by the addition of hot water only.

The check which has lately been given to the improper use of digestive ferments has, conversely, created a demand for semi-digested food. To meet this, many preparations have been devised, but we know of none so convenient in form so generally useful as the peptonising pellets. One of these pellets is sufficient, without other addition, to partially peptonise a pint of milk in a quarter of an hour, and the food so prepared is fit for feeding infants. Longer digestion gives fully peptonised milk, which can be retained by the most delicate stomach. These preparations are certain to be in demand, and our readers would do well to stock them.

PHOTOGRAPHIC NOVELTIES.

THE remarkable strides which have taken place in the photographic art of recent years, and which are entirely due to the invention of the dry-plate process, are not without direct interest to chemists and druggists. Those who regularly stock photographic chemicals and apparatus will probably find it useful to know of certain novelties which have recently been introduced by Messrs. Marion & Co., Soho Square, W.

In cameras this firm has secured a valuable property in the Middlemiss patent, the object of which, briefly stated, is to secure in one instrument, compactness, strength, great limit of focus, and adaptability to all positions. These *desiderata* could not be obtained in the old rigid and box-like cameras. When packed, the camera is less than 2 inches thick, exclusive of the dark slides. To bring it into action, the camera is placed upon the tripod. (Here we may remark that once there, it is unnecessary to remove it in order to take a negative at any elevation, and the reversing frame enables the operator to take either landscape or portrait (by adjusting the frame only.) In unpacking the camera the first movement is to raise the back and fix it by means of the struts and set-screws at the side. Next, the camera front is raised by raising the brass uprights and struts to which it is attached, out of the camera bottom, as far as they will go; the front will be then found to be exactly vertical with the camera base; now tighten the set-screws at the side; both front and back will be perfectly rigid, and the camera will appear as represented in fig. 1.

Here the camera is set for ordinary work; but it will be seen that the bellows body is capable of further extension for long focus, and equally it can be withdrawn to distances suitable for any shorter focus, as shown by fig. 2. The

struts and set-screws also enable the back and front to be set at angles for "up hill" or "down dale." It may be mentioned that by a simple provision the back and front are always set at true parallel. The camera is capable of taking

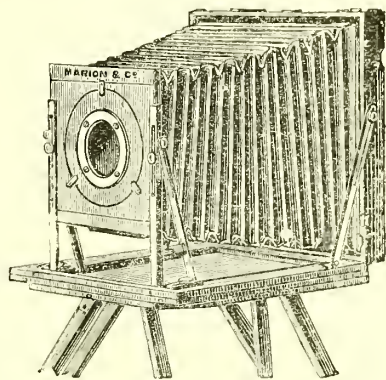


FIG. 1.

two pictures on one plate, and each is fitted with three double dark-slides. The sizes stocked are $\frac{1}{2}$, $\frac{1}{4}$, 10×8 , and

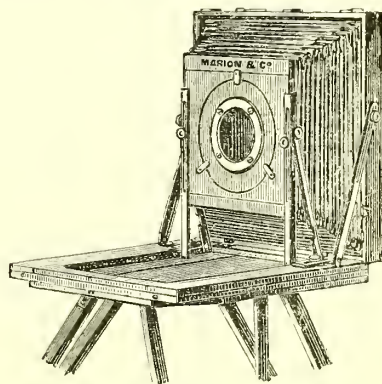


FIG. 2.

12×10 plate. The 10×8 appears to us to be a most suitable size; it measures, inclusive of 3 backs, $12 \times 13 \times 5$, and the total weight is only 12 lbs.

Amongst the many neat instruments which we have observed in the Soho Square establishment was Marion's "Metal Miniature 2-inch Camera," small enough to go into the pocket. With this in one's hand, and a sure aim, it is possible for one to take a sharp clear negative as quickly as a pistol can be fired. The pictures are excellent, and are capable of enlargement to 12 inches without losing definition. The firm has lately introduced pyrogallic acid in a compressed form; each tablet is made up of twenty squares, and each square is of definite weight; their convenience is unmistakable. It would be difficult to name all the specialties of the firm; for dry plates they are justly celebrated, and have recently effected great improvements for their production. The "Soho" plates—medium rapid, and extra rapid—are said to be the quickest in the market, and certainly they have cheapness to recommend them— $\frac{1}{4}$ -plates retailing at 1s. 6d. per dozen. An idea of the business which Marion & Co. do in dry plates may be formed from the fact that 12 tons of glass are frequently in the busy season sent out of their establishment per day. The latest development in this line is Cowan's "Portrait Chloride Plate" for contact-printing. These are opal plates coated with a thin gelatine film, sensitised, we believe, by a mixture of chloride and bromide. They afford excellent pictures of a sepia-like appearance, with as little trouble as with sensitised paper.

Friedrichshall.

THE WELL-KNOWN APERIENT MINERAL WATER.

IMPORTANT NOTICE.

By reason of an improved method of caption, by which dilution is avoided, FRIEDRICHSHALL WATER will be found now to be of CONSIDERABLY GREATER STRENGTH and EFFICACY than heretofore.

The ordinary dose is a large wineglassful (4 ounces) taken fasting. Most efficacious and more acceptable to the palate when heated or mixed with an equal quantity of very hot water.

"I know nothing at all equal to Friedrichshall. The LONGER it is taken the SMALLER is the quantity necessary to effect the purpose."

SIR HENRY THOMPSON, F.R.C.S., Lond.

Of all Chemists and Mineral Water Dealers. [2]

SEE SEABURY & JOHNSON'S Advertisement of INDIA-ROBBER POROUS AND SPREAD PLASTERS on page 27.

HEARON, SQUIRE & FRANCIS,

Wholesale and Export Druggists.

Established at 95 Bishopsgate Street, 1714.

TEREBENE,

Purified for Internal Use by Fractional Distillation.

INFANTS' FOOD, MALTED in BULK.

STANDARDIZED DRUGS AND PREPARATIONS.

PHARMACEUTICAL PREPARATIONS IN VACUO.

5 COLEMAN STREET, LONDON.

 **SILICATED CARBON**
PATENT
MOVABLE
BLOCK
FILTERS.
SEE ADVERTISEMENT, PAGE 14.

HAY'S SOLUBLE ESSENCE OF GINGER. See page 1.

HAY'S NEW PREPARATIONS. See page 1.

HAY'S COMPOUND FORTIFIED ESSENCE See page 1.

EDITORIAL NOTES.

PROPOSED ANALYSIS OF TEN THOUSAND PRESCRIPTIONS.

IT would be of considerable interest if we could obtain from dispensing chemists in the United Kingdom full analyses of the prescriptions they have copied, say since January 1, 1886. We should learn with some degree of certainty what are the most popular drugs and preparations at the present moment, and we should have a basis for comparing variations of fashion in the course of a year or two. We shall be very much obliged, therefore, to any dispensers who will give themselves the trouble to analyse the prescriptions in their books copied this year, and give us a detailed statement of the substances

or preparations ordered. If one hundred dispensers will favour us, and if their reports average 100 prescriptions each, we shall have statistics for ten thousand recent prescriptions, and we will classify the information thus obtained. We do not wish for copies of the prescriptions, only a table showing how many times calomel, pil. rhei co., water, &c., occur. When two or three articles (as, for instance, pills and mixture) are ordered at once, it will be best to count each as one prescription. We shall be glad to know, however, the proportion of pills, mixtures, lotions, and so on. We would ask correspondents who are inclined to assist us to give details in the following order: (1) Number of prescriptions; (2) variety (so many pills, so many mixtures, &c.); (3) ingredients, name of preparation just as ordered. For instance, we should like to have rhubarb, tincture of rhubarb, compound rhubarb pill, all separate, not included under one head as preparations of rhubarb, as one of the most interesting results of the inquiry would be to ascertain the degree of popularity of the several preparations. We will treat all information thus sent to us as confidential.

The return sent in to us may be in the subjoined form:—

Analysis of the last — prescriptions copied. Of these
— were for pills, — for mixtures, — for
ointments, — for lotions, &c.

The ingredients were as follows:

Water occurs — times
Tinct. opii. occurs — times
Potass bicarb. occurs — times
Pil. rhei co. occurs — times

and so on.

WASTE CARBONIC ACID GAS.

IMPORTANT TO AERATED-WATER MAKERS.

MR. CHARLES A. FAWSITT (*Jour. Soc. C. I.*, February) points out the enormous loss of carbon dioxide in the manufacture of alcohol, and advocates its utilisation. He calculates from the amount of spirit manufactured in the United Kingdom in 1883 (25,000,000 gallons of proof) that 48,300 tons of carbonic acid gas are annually thrown into the atmosphere. He suggests a mode of collecting this, and proposes its use in (1) the manufacture of bicarbonate of soda; for (2) aerating water, (3) for the manufacture of liquid carbon dioxide, (4) in the ammonia soda process, and (5) for the decomposition of alkali waste. He calculates that the waste gas would yield the following amounts per annum:—

	Tons
Bicarbonate of soda	184,000
Bicarbonate of ammonia	86,000
Alkali waste, Schaffner and Helbig	79,000
" " Gossage	79,000
Liquid carbon dioxide	48,000

The value of the gas wasted is 140,000*l.* per annum, and Mr. Fawsitt believes that it is sufficient to supply all the makers of aerated water in the United Kingdom. In the discussion on Mr. Fawsitt's paper, which was read before the Glasgow section of the Society, Professor Dittmar stated that the idea of utilising the waste gas was not absolutely new, for "the pharmacutists of the Rhine used formerly to prepare their own bicarbonate of soda, and for this purpose they used carbonic anhydride prepared by fermentation."

Anyone who has given a thought to this subject will welcome Mr. Fawsitt's suggestive and interesting paper. The possibilities for the utilisation of this waste product are necessarily circumscribed, but it so happens that the largest distilleries are as a rule located in or near large centres of population—such as Belfast, Dublin, Edinburgh, Glasgow, Liverpool, and London, and the gas could therefore be

utilised on the spot. Then something is to be said, but not too much, of the influence which the large amount of carbon dioxide has upon the air we breathe. The influence may not be great, and has never been felt, but if it is possible to utilise the gas rather than turn it into the air, a little will have been done to lessen the impurity of the atmosphere of large cities. As to the plans for utilising the gas, perhaps the best, to begin with, would be to condense it on the spot, and if liquefied gas could be produced at a reasonably low price it might be available for the other purposes mentioned by Mr. Fawsitt.

DIPLOMA-MONGERING.

It appears that degrees *in absentia* are still obtainable, notwithstanding the imprisonment of the notorious Dr. Buchanan in America, and the high moral tone adopted of late years by Continental universities. But it is not surprising that this should be the case. So long as gentlemen with a certain proportion of education are willing to give ten or twenty guineas for a shillingsworth of parchment, so long will there be accommodating dealers in diplomas ready to supply them. One of these diploma-brokers has lately been spreading his net with a view to catch pharmacists, and a correspondent of an inquisitive turn of mind has extracted from him as much information as can be obtained gratis. For further details a preliminary fee of 3*l.* 3*s.* is demanded, to be deducted from the sum total payable should the candidate "proceed to graduate through my assistance." The diploma-monger resides in a western suburb of London, and he takes some little time to answer applications in consequence of "the magnitude of my correspondence." "Graduation," he says, "may be effected either by examination or *in absentia*. The total fees range from 11*l.* 3*s.* to 25*l.* according to circumstances. The universities concerned are all of first-class repute. The information, advice, and practical directions I furnish on receipt of the three guineas are so very complete that candidates are, as a rule, enabled to proceed to their degree without any further assistance." A candidate who may prefer to take his degree *in absentia* need only give documentary evidence of his previous studies and examinations, and the broker leads his correspondent to expect, with abundant reason no doubt, that after paying the fees he may be sure of getting through.

That such a trade should be possible is surprising; and, quite apart from any question of morality, it is astonishing that anyone should be found willing to spend his money on a worthless diploma which, we should hope, he would be at least ashamed to display.

PATENT MEDICINE STAMPS.

WE are as yet unable to judge whether there is any sufficiently unanimous desire among chemists for a re-arrangement of the rates for patent medicine stamps to justify us in preparing the memorials to the Board of Inland Revenue for signature, as suggested last week. Some two dozen chemists have indicated their willingness to obtain signatures to such a memorial, but, as will be seen from our Correspondence columns, several writers express disapproval of the proposed modification. It would be absurd to go before the Board of Inland Revenue to ask them to get a new Act of Parliament passed (for this would be necessary) unless it could also be shown that this was the request of an overwhelming majority of the trade. Until there is more evidence of such a condition of things we must decide with Macbeth to "proceed no farther in this business."

At the same time we think the advantage of a halfpenny

stamp for sixpenny articles is hardly appreciated. If such could be obtained it would enable chemists to claim proprietary rights in, and to recommend for complaints to which the human body is liable, any sixpenny box of pills or bottle of medicine, or packet of powders, for a very trifling tax. This, it seems to us, would prove a benefit to the revenue and to chemists at the same time. The objections to it seem to be reducible to this, that others—grocers, stores, hucksters—could do the same. Of course they could; and if chemists cannot compete with these tradesmen in the business of supplying medicine to the public, there is an end to all hope. To advocate, as one of our correspondents does, that chemists should rigidly set their faces against all sorts of patent medicines, not from any lofty moral considerations, but merely because the profit has been so largely diminished, is, we venture to think, an utterly impracticable idea. If "A." should heroically decide to adopt such a course, the only effect will be to divide his trade among the other letters of the alphabet. All the despotisms of Europe, all the sarcastic talent of the two hemispheres, have been arrayed against patent medicines, and they flourish. The opposition of a few angry chemists will not crush them. It is just as well in any scheme to reckon with the inevitable and to submit to the irresistible. The other suggestion that is often put forward, namely, that chemists should agitate for a higher patent medicine licence, is almost as impracticable. The only reason given for such a proposal is that the result would be to shut out the smaller dealers. Would it be possible to go before the Board of Inland Revenue with such a reason as that? They know their business; they know, and anyone can see, that the reduction of the licence has largely benefited the revenue on the whole. They did not reduce the licence to please chemists, nor would they advance it to please them.

That put-up proprietary medicines are in vast demand is an obvious fact. The question whether chemists should make the best they can of that fact for themselves seems to us to answer itself.

COCOA AND COCAINE—A DOCTOR IN A FOG.

UNDER the above title there is published in the current number of the *Medical Press and Circular* an original communication by Mr. George Foy, F.R.C.S., which contains information which will open the eyes of those who have watched the progress into a recognised place in therapeutics of the Bolivian plant *Erythroxylon Coca* and its alkaloid, cocaine. After describing the discovering in Mexico by the Spaniards of the beverage *chocolatt*, and its subsequent introduction into Europe, Mr. Foy branches off into a description of the *Erythroxylon Coca*, the leaves of which, he says, "form the cocoa of commerce," and it is in them that "the medicinal and nutritious properties exist." This section of the paper affords strong evidence that the author's ideas are revolving round *Theobroma Cacao* and *Erythroxylon Coca*, for we find him stating that "from its analysis by Dr. Edward Smith (Foods, 1880), it should form a useful addition to the ordinary diet of seamen, as sweetened cocoa contains 3.934 grains of carbon and 140 grains of nitrogen." We do not stop to inquire how much coca, or cocoa, this is contained in, for a paragraph catches our eye in which it is proclaimed that the consumption of cocoa in this country in 1880 was 10,000,000 lbs., and that it is calculated that "10,000,000 of human beings indulge in cocoa chewing." Then, "recently it has been used therapeutically for many forms of neuralgia," and "the preparations usually employed are the infusion,

5 grains of the dried leaf to the ounce of water to Mariaux's cocatine, Burrough's coca-valoid, and the liquid extract." Again, after referring to the present price of "cocoa leaf," he states that "cocoa contains two alkaloids: theobromine and cocaine." After referring to the discovery of theobromine by Woskiesensky, and of cocatine by Niemann, the author enters into the therapeutics of the subject, and the fog clears away, probably because theobromine "as yet is little used in medicine."

Veterinary Pharmacy.

GRIPES.

GRIPES is a name given to almost any internal affection causing acute abdominal pain; the causes are many and various. Nearly every stableman recognises abdominal pain, and the majority have very strong opinions of their own as to the seat of disease, if they do not know of a nostrum or certain cure. It is almost unnecessary to say that these opinions are not formed on any knowledge of the subject, nor indeed on experience, for when a horse dies he is seldom seen open by the attendant groom or carter, and the cause of death is not always to be easily discerned by a person unfamiliar with the natural condition and appearance of the viscera. It is very misleading to the intending prescriber unless he be an old practitioner to be told most positively that the patient is suffering from kidney disease when all the symptoms are obscure, and he would be glad to learn the true history of the case. He cannot ask the patient as can the human practitioner, and if he listens to the attendant he is a great deal more likely to be led astray than if he concentrate his attention on the symptoms, and find out by careful examination what were the special characteristics of a former attack, if the groom is very positive of what is the matter. Information of this kind cannot be obtained from an ignorant man who has been flatly contradicted at the outset, and it is always better to let the attendant do the talking and never be in a hurry to give a decided opinion. It is quite consistent with a painstaking effort at diagnosis and a conscientious endeavour at treatment to at the same time give your views of the case after the manner of the most eminent politicians, so that the result (whatever it may be) shall prove that you were right. Let it be quite understood, then, that when called to a case of gripes it may turn out to be anything from a ruptured liver to a simple bellyache. The indications of pain in the viscera are very much alike, and after attempting a general description of the horse's behaviour under such circumstances we will endeavour to differentiate between the causes, and to suggest the most likely treatment to be successful.

Horses are more likely to be attacked with colic or gripes after work than during or previous to it, and more frequently in hot than in cold weather. We will suppose a typical case, such as a mineral-water van-man, who has been delivering a load in the hot weather, when a suddenly increased demand is made upon the owner, and every man and horse has to do extra work. The horse comes home apparently well, but wet with perspiration, and is immediately offered cold water, which he drinks with avidity; and if he be watered at a tank supplied from the main so much the worse, as the water is colder, and he takes a much larger quantity than the most careless of "van demons" would allow, if the said demon had to fetch it in a bucket for him. A few minutes afterwards the corn-sieve is brought, but he does not whinnie, and the attendant notices that his coat is turned up and he does not want his "tommy." Presently he begins to scrape the ground with his front foot, perhaps one, perhaps the other, whisks his tail, stamps with his feet, appears excited, then dull and listless, scrapes again, brings all four feet close together, and if not racked up will go down after several feints at doing so. Now he will roll on his back, groan and sweat, and as suddenly get up again in an interval of respite, and perhaps begin his meal; another paroxysm of pain ensues, and the same process is repeated—this is a typical case of gripes or spasmodic colic. If a gripe draught or "drink," as it is commonly called, is administered, he probably recovers in an hour or two. The real condition in his

case was spasm of the muscular coat of the intestines, extremely painful, as the agonising expression of the horse testifies, but leaving no ill effects if the diffusible stimulants employed were of a proper kind. Before prescribing, it should be ascertained if anything has already been given, as upon the answer depends the modification or alteration of your dose. If the groom has introduced tobacco into the "sheath," or "figged" the animal, the plug should be removed. In ninety-nine cases out of a hundred the attendant is positive that it is "his water" that is wrong, and backs up his assertion by reference to some one who has seen him pass thick urine. To those not acquainted with stable nomenclature, we should explain that "figging" is the insertion of a piece of chewed ginger into the rectum; in this case as a remedial agent, though more often used by horse copers to make a sluggish old horse look and behave in a lively and youthful manner at a fair or sale-yard. Of course no good can come from such a remedy any more than from the insertion of the tobacco in the animal's sheath, and lovers of horses ought to know that "figging" is a punishable offence, and lose no opportunity of denouncing it. It may also be stated that horses in perfect health, and of both sexes, frequently pass thick urine, and they are much more likely to be wrong when it is colourless than occasionally thick.

If nothing more than a gill of whisky or other spirit has been given the following will be a good draught:—

Æther. rect.	..	..	..	..	3ss.
Tinct. opii	..	..	..	..	3vj.
Ol. tereb.	..	..	..	..	3i.
Tinct. assafr.	..	..	..	..	3iv.
Ol. lini, ad	..	..	..	..	Oss.

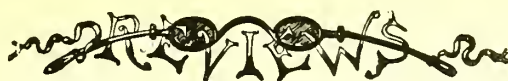
M. ft. haust.

This may be repeated in an hour, if necessary.

The injection of a gallon or two of hot water per rectum is of the utmost service in a case of this kind, but the dung should be first removed from the rectum by introducing the hand as far as the arm can reach. Some little resistance is offered by the sphincter ani, but it is easily overcome by introducing two or three fingers first, and the hand and arm should be well greased, both for the convenience of the operator and of the subject. This is not a very pleasant operation, but the man who objects to do it is not fit for a horse-doctor, however well versed in the art of curative medicine. It is not every case of spasmodic colic which terminates in the happy recovery of the animal in a few hours, and a vast number of valuable horses die every week of this complaint; it cannot therefore be considered a light matter, and the professional attendant should not be too sanguine of recovery when those intervals of ease would lead the uninitiated to suppose it was all over. The sequelæ to be feared in spasmodic colic are strangulated hernia and intussusception; the former, commonly called twisted gut, or gut-tie, is the result of the muscular spasm before referred to, as also is intussusception, in which latter case a portion of the gut is invaginated like the finger of a glove when pulled off a wet hand. A fatal result may generally be expected, though it is supposed by some good authorities on the subject that both these conditions are occasionally remedied by the relaxation of the spasm: as we can only see those cases which prove fatal, it will probably remain a matter of conjecture to the end of time. We know, of course, that human subjects have been successfully operated upon, but horses are not only difficult patients to manage, but much more susceptible to peritonitis, and cannot be persuaded to lie on their backs with surgical appliances for days, and be fed with a spoon.

It is a tradition of the stable that when a horse is attacked with gripes he should not be allowed to lie down, but constantly walked about, and the origin of this is an idea that rolling is the cause of twisted gut; we do not agree with this, but consider a good bed of straw and liberty to seek an easy posture much more conducive to recovery, and if movement of the intestines could be caused by rolling, a gut already twisted might be untwisted in the act; there is, however, very little doubt but that spasmodic contraction of the muscular layers of the intestine is the cause of both the conditions we have been considering.

In our next paper we propose to speak of Flatulent Colic, which has many more causes, and requires different treatment. It is of the utmost importance to distinguish at the outset which of these forms has to be dealt with.



AND

Literary Notes.

Elements of Materia Medica and Pharmacy. By Alfred M. Gerrard, Pharmaceutical Chemist, &c. London, 1886: H. K. Lewis, 136 Gower Street, W.C. 12+492 pages, crown octavo. Price 8s. 6d.

It has been an open secret in pharmaceutical circles for the last twelve months that Mr. Gerrard was writing a students' manual of materia medica and pharmacy, and the advent of the work has been awaited with some expectancy. Mr. Gerrard's attainments as a practical pharmacist, his qualifications as a teacher, the record of his excellent work in research, and latterly his experience as an examiner, all point to him as one eminently privileged and fitted to write a book for young pharmacists.

Apart from the fitness of the man we consider the opportunity an unusually good one. In no department of pharmaceutical literature is there greater deficiency than in materia medica manuals for our students. "Pharmacographia," truly an excellent work written for students of all ages, is too exhaustive for Minor students; indeed, it would be but a poor compliment to its authors to say that it is adapted for such readers. Of all other manuals in the department those which have been in greatest demand—and which comprise 90 per cent., we may say, of the whole—are written by medical men, whose training peculiarly fits them *not* to write for pharmaceutical students. There are a few works by pharmacists, but these, as a rule, are for special courses of study, and on that account are not so well adapted to the general reader.

Mr. Gerrard has taken a fair estimate of his constituency, and has given us an unpretentious work, which has many good features to recommend it. The arrangement is on good though not absolutely original lines. First, we have Section I., comprising *Materia Medica*, and arranged in two divisions. The first, or Inorganic Division, comprises chemicals, inorganic and organic alike; the second, or Organic Division, includes drugs of vegetable and animal origin. Section II. is devoted to Pharmacy and subsidiary subjects—posology, incompatibility, weights and measures, &c. The purpose of the arrangement is to facilitate study: chemistry first, because it is the basis; next drugs, which, generally speaking, owe their activity to principles of known chemical composition; finally, pharmacy, which "cannot be intelligently understood until chemistry and materia medica have been well studied: the reverse of that order of study," says the author, "would be placing the cart before the horse."

In subsections an excellent feature is the prefatory chapters of definitions; thus, the Inorganic Division is prefaced by chapters of *definitions of chemical groups*, and of *chemical reactions of bases and acids*. These form an excellent preparatory lesson to the student, and engender interest in and intelligent ideas regarding the text.

The Inorganic Division is subdivided into *Elementary bodies, Acids, Bases and Salts, Alcohols and allied bodies, and Hydrocarbons*. Thus by a rather free reading of what is *inorganic* the author conveniently groups together all that are chemical, except the active principles of drugs, which are considered under their sources. The text describes the processes of preparation, which in some cases are briefly commented upon, and in each case explained by equations; characters are given and explained in the same manner.

The Organic Division is prefaced by a chapter of *definitions of vegetable groups*, such as balsams, corms, stearoptenes, &c., official examples of each group being given. The arrangement of drugs in the text is by natural orders on the system adopted by Bentley and Trimen. The official members of each natural order are grouped, with botanical name, part used, and habitat. Each drug is then described, characters given, and sometimes, but too seldom, explained; active constituents and preparations of the drugs are named, and occasionally adulterations and substitutes are mentioned.

In the second section (Pharmacy) preparations are studied under the pharmacopœial groups; the whole are preceded

by a chapter of short definitions of pharmaceutical processes, and "definitions of groups are given under each head, and points worth impressing on the memory brought under notice." Except in these matters, this section is mainly a condensed reprint of the Pharmacopœia.

Throughout the book the author gives notes on therapeutics and doses. These are such as a pharmacist would write, and just what our young men require. Then there are special chapters on posology and strengths of galenical preparations. There is no question about the object of these; we might say that they will favour "cram," but we prefer to say that they are time and brain saving contrivances. There are also good chapters on *Incompatibles, Poisons and their Antidotes*, and groups of preparations arranged according to strength.

Our estimate of the work is that Mr. Gerrard has started well; he has guarded against being hypercritical; this we are pleased to notice, because the Pharmacopœia affords much scope for critical comment, which, however, is quite out of place in a students' manual. Yet the author does not fail to point out improvements which have been suggested. As a manual for Minor students, the book does not admit the fulness which would be desired; facts are expressed in the briefest possible space, generally without imperilling the value of the information, but there are notable exceptions: in the Inorganic Division, for example, there are instances where a process is represented by an equation without description. So of adulterations: attention has evidently been given to these, but not enough. What has been done is fairly well done, but we trust that the author will extend and increase the notes on adulterations when a second edition of the book is required. This, perhaps, more than any other, is the subject which students find it difficult to get up, simply because the modern information is scattered, and antiquated text-book information much requires revision.

Though we might be tolerably near the truth in saying that the faults of Mr. Gerrard's book are errors of omission rather than of commission, it is by no means free from the latter. We are surprised that so many errors have been skipped in reading proofs. We do not attempt to name them, because our list is a very long one. We only trust that when a second edition is called for greater care may be used. The volume is well got up; the printing is clear, easily read, and so arranged as to be attractive.

The Vegetable Materia Medica of Western India. By W. Dymock, Surgeon-major Bombay Army, &c. Second edition, revised and enlarged. London: Triibner & Co., Ludgate Hill. 1885. In 5 parts.

THE necessity for a second edition of this important and scholarly monograph so soon after the publication of the first edition is the best testimonial to its intrinsic value. In our several notices of the first edition we entered very fully into the plan of the work, and it is only necessary that we should now refer to the changes which have been made.

The most important change is one which all lovers of uniformity in nomenclature will welcome. Since the first edition was published, Dr. Watt's "Catalogue of the Flora of British India" has been drawn up, and has in a sense been officialised. Dr. Dymock therefore adopts the nomenclature of Dr. Watt instead of that of the "Bombay Flora" of Dalzell and Gibson. Then the author has got together much additional philological matter, and more references to Greek, Latin, Mohammedan, Hindostanee, and other writings. He has also added considerably to the value of the work by giving references to figures of the plants.

Such a book as this has necessarily a limited circle of readers, but it is satisfactory to know that the readers are appreciative, and they will join us in congratulating the author upon the success which has attended his labours.

In an attractive pamphlet on "Painless and Perfect Dentistry," Dr. G. H. Jones, the well-known and commercially successful dentist, gives some sound advice and useful instruction on the care of the teeth. The booklet is written for the use of the public, and is as free as such a book possibly can be from technical expressions.

Deacon's Newspaper Handbook and Advertisers' Guide. London. S. Deacon & Co., Leadenhall Street. 2s.

THIS volume is very neatly produced and is unique in respect of its numerous reduced facsimiles of the fronts of a great many newspapers. The publishers, whose experience is a long one, tell us that "Those who understand the law of advertising invariably succeed and amass fortunes. There is not a single exception to this rule." That statement seems to point to a royal road to wealth. But the path, and the statement too, are very slippery ones. Many advertisers have been wonderfully successful, and there is no evidence that they have had any clear perception of any law in the matter, and many with the most elaborate theories have failed. Just what the law is remains a problem for the investigator.

Sell's Dictionary of the World's Press. London: Sell's Advertising Offices, 167 Fleet Street. 1886. 2s.

MR. SELL has produced another interesting volume, which, besides giving a directory of newspapers and other periodical publications and a multitude of advertisements relating to these, contains over one hundred pages of readable articles and sketches concerning the newspapers and the advertisers of this and other countries. It appears from Mr. Sell's information that the champion advertisers of the moment are (medicine men as usual) the St. Jacob's Oil people. He states that this company have in a single year spent over 100,000*l.* in advertising in 11,000 newspapers. This statement, he adds, was brought out in evidence in a recent trademark suit successfully prosecuted by the company. Mr. Sell gives many hints to advertisers, and his book is useful to such in other respects.

Veterinary Pharmacology and Therapeutics. By James Brodie Gresswell, M.R.C.V.S. London: H. K. Lewis. Pp. 206. 5s.

MR. GRESSWELL has professedly based his work on Martindale's "Extra Pharmacopœia," following generally the arrangement of that work. Many of the descriptions of drugs and formulæ have been copied from the "Extra Pharmacopœia;" indeed, the tendency has been to quote therefrom rather more than seems absolutely necessary; but it is better to err on the side of fulness than on that of deficiency, and in almost all cases the application of the various medicines to the diseases of dogs and horses, and the doses in such cases, are carefully added, original and quoted observations as to effects being added. The inclination to experiment with the newer remedies to the prejudice of the older-fashioned "horse and cattle medicines" seems a little too pronounced in this author, but his work will certainly fill a gap in veterinary literature which has long been vacant.

Dogs in Health and Disease, as Typified by the Greyhound. By J. S. Hurdall, M.R.C.V.S. London: E. Gould & Son.

THIS is a small treatise (80 pages), and, as may be judged by the name of the publishers, the author is a homœopath. Nearly 20 pages out of the 80 are devoted to eulogising the homœopathic principle, "the one brilliant star that shines out, pre-eminent in its effulgence among the chaos of therapeutic literature." This sort of tall writing does not recommend a treatise on the diseases of dogs. Dog troubles are described very briefly and imperfectly, and the medicines ordered are exclusively from the homœopathic stock, and in the usual small, though not in infinitesimal doses. Obviously this consideration will limit the general usefulness of Mr. Hurdall's labours, however scientifically based they may be. He seems content, however, to wait for due recognition till the "future ages," which are to bring so much retribution to actually triumphant allopaths and compensation to the persecuted homœopaths.

The Essentials of Materia Medica and Therapeutics. By A. B. Garrod, M.D. Eleventh edition, revised and edited by Nestor Tirard, M.D. London: Longmans, Green & Co. 1885. 36 + 546 pages. Price 12*s.* 6*d.*

THIS time-honoured manual has now reached the eleventh edition, and bids fair in this respect to rival some other

pharmaceutical text-books. Dr. Garrod has on this occasion had the assistance of his friend and former pupil, Dr. Tirard, as editor. The principal changes which have been made are due to the publication of the new Pharmacopœia. The additions, however, have caused little alteration in the bulk of the book, many parts of it having been rewritten, so as to keep it within the limits of a student's text-book. All the additions to the Pharmacopœia have been treated in the thoroughly sound manner that has invariably characterised Dr. Garrod's "Essentials." It is well known that it is one of the few books which are suitable for pharmaceutical and medical students alike. In Dr. Tirard's hands the pages have lost none of their interest, and the new edition will be a welcome acquisition to the bookshelves of chemists and druggists.

ENGLISH STATE NEWSPAPERS.—It is not generally known that the State is a newspaper proprietor, and by no means the least prosperous in the country. It owns three papers, the *London Gazette*, the *Edinburgh Gazette*, and the *Dublin Gazette*. According to accounts made up for one year, the *London Gazette* showed a net profit of 25,714*l.* 19*s.* 4*d.*, the *Edinburgh Gazette* was a trifle over 3,000*l.*, whilst the *Dublin Gazette* was a little over 429*l.* The editorship of the *London Gazette* (worth 800*l.* a year) is one of the very few sinecures which dangle as prizes before the English journalists.—*Deacon's Newspaper Handbook.*

JEWISH FOLK-MEDICINE.

MEDICINE-MONGERING of one kind and another has always been a Jewish speciality, and from the time of the Babylonian quacks, whose prescriptions may be found in the Talmud, down to the present day, the orthodox Jew has stuck to his belief in popular remedies and occult physicking with all the pertinacity of his pertinacious race. Western Hebrews have emancipated themselves more or less from these and cognate superstitious notions; but in South-Eastern Europe, and more especially in Palestine, folk-medicine, as it is euphemistically called, flourishes in this nineteenth century among all classes and sections of Jews to an extent simply incredible to those unacquainted with the inner life of Oriental Jewdom. In the congenial atmosphere of Eastern ghetti, the materia medica of archaic and Old-world quackery is still in high repute; dogs' liver, cow-heel, earth-worms, hares' feet, goats' fat, live ants, human bones, cocks' wings, doves' dung, powdered mummy, wolves' entrails, and parings of asses' hoofs, rank high among approved remedies in cases of sickness. And if variety be, as the adage asserts, charming, then the popular pharmacopœia of the Oriental Jew may undoubtedly lay claim to that quality, since its contents range from dog's-head broth to the dew that falls upon Elijah's grave on Mount Carmel, and from a stew of fishes' eyes to a poultice of goats' excrement. The chief repositories of the system of occult medicine among the Jews are the so-styled "Gabbetes," elderly persons who attend the sick and dying, and perform the last offices for the dead. There are few ills to which flesh—Jewish flesh—is heir but they have a remedy for, whether it be a wart on the nose or a fit of colic, a low fever or a brutal husband. And where they are at fault there is always some "chosid" or "pious-man" who can furnish forth an appropriate prescription or mystic formula of due efficacy.

In cases of obstinate and long-standing illness the grand specific among the Jews of Turkey and Palestine is the "Indolka" or "Indolkado." This is a kind of ceremony, oblation and prayer rolled into one, and a most curious sample of genuine folk-medicine. The house in which the patient is lying is cleared from top to bottom, and everybody, relatives and friends included, leaves it. Even strangers living in the same court quit it for the time being. When all are gone, and the sufferer is quite alone, an elderly woman accustomed to the business enters the sick-chamber, and sees that there are no religious books about, and nothing that can suggest devout thought. She then procures some wheat, barley, salt, sugar, water, honey, and fat, as well as six eggs. About midnight she takes the ingredients, excepting the eggs, mizes them all

together, and spreads a little round about the bed, on the threshold, and in each of the four corners, repeating all the time the following formula:—"I implore of you, you Masters, to have pity and compassion upon the soul of So-and-so, son of So-and-so; forgive the sin he has committed against you, and restore his soul, his strength, and his health; let this honey sweeten your mouth, this wheat feed your cattle, and this salt create peace and love between you and us." She then breaks an egg in each corner, prostrates herself upon the floor and kisses it, exclaiming, "Let this soul be instead of that." The ceremony is repeated three, seven, or nine nights, according as the patient recovers or no. It is an expensive remedy, the charge of the person undertaking it being twenty francs. Poor people content themselves with simply putting a little salt and water on the doorstep, and repeating the same words. In more serious cases recourse is had to the "Indolka Gedolah," a somewhat similar ceremony. The house is nicely arranged, the sick person dressed in new white garments, wax tapers are lighted, and sweet-smelling spices are strewn about the chamber. At midnight a black cock is slaughtered, and the blood is smeared upon doorpost and walls, while the formula, "This soul for that," is repeated as before. In some instances the ceremony is performed in every house which the sufferer has occupied in the course of his life, in order that the offended powers, to whom the disease is of course ascribed, may be properly mollified.

For common ailments the Jew has a wide choice of simple and inexpensive remedies. If suffering from an ordinary attack of feverishness in spring or autumn, he has only to go to the nearest stream, procure a black ant and a piece of hollow reed, and then put the ant inside the reed, securely closing both ends. He must throw this into the water, saying, "My load upon thee and thy load upon me." If this should not effect a cure, he is recommended to anoint himself with an unguent of suet soaked in the milk of a woman suckling a male child. For a bilious attack, the sufferer has to drink night and morning a tumbler of water with a live grasshopper in it. In this complaint, too, the ordinary red earth-worm is in high repute. It is gathered after heavy rain, roasted over a fire and pounded, and then taken in wine. If the attack culminate in jaundice, the patient takes an apple, fasting, on three consecutive mornings: with the first he swallows nine gnats, with the second six, and with the third, again, three. This is regarded as an infallible specific. Eye affections are very prevalent among the Jews of South-Eastern Europe and Syria; and those afflicted with ophthalmia or partial blindness invariably try an old recipe dating from Talmudic times, and strongly recommended by the orthodox. The sufferer goes into the street and a friend ties one end of a cord to his left leg. The other end is attached to a dog, preferably black. Seven pieces of meat, obtained from seven different houses, are then eaten by the patient, the dog is set loose, and the person performing the ceremony calls out, "Blindness of So-and-so, son of So-and-so, depart from him into the eyes of the dog." For simple cases of sore eyes, a poultice of doves' dung mingled with honey is extremely popular. For toothache there are several infallible cures. An elderly person takes a nail and hammers it into the wall of the room, repeating the words, "Adar Gar Vedar Gar," and then adds—"Even as this nail is firm in the wall and is not felt, so let the teeth of So-and-so, son of So-and-so, be firm in his mouth, and give him neither pain nor uneasiness." The following formula, repeated three times, is also highly recommended:—"Gadash, Galash, Galsh Yegad Ugdar Galish Gadish." The meaning of these words and their application we have never been able to discover. Some Jews who suffer from toothache go to a tree near, cut a thin slip of wood from under the bark, and put it in the hollow of the aching tooth, so as to cause blood to flow. The splinter is then re-inserted in the tree, with the words, "Dobruwetter maladik."

Owing to bad food, bad water, and dirty surroundings, Eastern Jews are very liable to boils and abscesses; and the popular remedies in these cases are more remarkable for their actual nastiness than for their possible efficacy. The great curative agent, in fact, is dogs' excrement, tempered sometimes with honey, sometimes with fat or oil. An outward application of this stuff, in conjunction with a medicine of ox-tail ashes in wine, is considered the thing. For hoarseness and complaints of the throat and air-passages, an approved prescription is to take a new plate, write on it with ink the three mystic names, compounded of the Hebrew letters, "Ain,

Yod, Aleph," "Vau Teth," and "Teth, Yod, Koph"; then wash them out with wine, and after adding three grains of a citron used at the Tabernacle festival, drink the beverage. Fits, epileptic and ordinary, are treated after the following fashion:—The patient's head is covered, and a pious neighbour stands by the bedside, while the "practitioner" called in recites this invocation:—"In the name of the Lord of Israel, in the name of the angel Raphael, and in the name of the Hosts of Heaven, and in the name of the One hidden and concealed, I adjure you to quit the body of So-and-so, the son of So-and-so, to quit him at once and without doing him hurt; and if you do not go, I curse you with the curse of the Tribunal above and of the Tribunal below, and with the curse of Joshua, the son of Nun." In cases of severe prostration and debility, pounded mummy and human bones are administered; but this is considered a very dangerous medicine, and great precautions are taken to prevent evil spirits interfering with the patient or hindering his recovery. The mummy is pounded in a mortar—or if human bones are employed, they are first calcined—and beaten up with honey and spice. The compound is then put into a new vessel, never before used for any purpose whatever, and placed outside the house, on top of the roof, overnight, so that the heavy dew may fall upon it. It is then divided in nine portions and taken on nine successive nights. On the last evening, and before the medicine is administered, the sick person is washed and dressed in white garments from head to foot. And as this is considered the critical period, two men or women sit up all night in the room, in order to keep off the demons who are on the watch for their prey. If it be a man who is sick, no woman is suffered to enter the house during the whole nine days. When all other remedies fail, it is sometimes the custom among Palestinian Jews to take the patient to the grave of Elijah the Prophet on Mount Carmel, and leave him there alone three days and nights.

The maladies of children are quite a specialty of Jewish folk-medicine. There is no complaint incidental to youth but the Jewish medicine-monger has the cure at his or her fingers' ends. Indeed, long before the child is born, the mother-expectant is the recipient of many little attentions designed to ensure the safety and health of her offspring. The elderly ladies who attend to these matters procure a small quantity of dung or clay, and put it in a pot under the bed for three nights. In a second vessel they then place some wheat and pieces of bread, and in a third a very small quantity of water. The ingredients are then kneaded together and formed into the shape of a dog, or any other animal agreed upon. This is considered useful as a precaution against fright or mishap during accouchement. If an infant after birth show signs of weakness or disease, it is taken to a newly-married man—one married not more than a fortnight. He bites as gently as may be the infant's little finger, and kisses it on the forehead. A little water is then poured over the child's neck, and the man drinks it, thus charming away the little one's complaint. In default of a newly-married person, the father of a child born within three weeks is competent to act. During circumcision and after, bleeding is sometimes troublesome, in which case there is the following curious formula to be recited, with the infant's face towards the north:—"Seven brothers strove one with another, they wounded one another, and they bandaged one another, so that no blood came; in like manner stay the blood of this child, the son of So-and-so, and grant him a speedy recovery." If a child, as it grows older, show signs of debility or wasting, a dog's head is boiled in a cauldron of water, and the body well washed in the broth thus prepared. For tape-worm in children, there is an invocation used running thus:—"In the name of Abraham, Isaac, and Jacob! Three worms plagued Job and consumed his flesh: one was red, one black, and one white, yet of all was he relieved. Even so relieve the son of So-and-so from the worms that infest and consume him." Young people liable to fits are held to be benefited by mixing with their food a small quantity of wolf's liver, calcined and pounded until fine as flour, especially if, in addition, they have a hair of a black dog sewn in their garments. The "formulas" used in such cases are, however, like the items of an auctioneer's catalogue, too numerous to mention.

As a matter of delicacy, nothing has been said of popular remedies for female ailments. Easterns are not over-nice in referring to such things, and any attempt to deal with the complaints and cures included in this division of Jewish

folk-medicine would prove embarrassing. Be it, therefore, understood that the popular medicine of the Jews by no means neglects the fairer half of the community, and prescribes for their special behoof and benefit such delicacies as fishes' eyes pounded and mixed with wine, radishes in cream, cocks'-wings roasted and pounded, saffron soaked in goats'-fat, wire-worms in wine; poultices, emulsions, and liniments of every conceivable degree of nastiness, and prayer-formulas innumerable. As a curiosity—though not a "remedy" in the usual sense of the word—a common Jewish recipe for im-

proving a brutal husband may conclude these jottings. Let the wife cut the nails of her fingers and toes, burn them in a fire, preserve the ash, and then when her husband is not looking, let her put this ash in a plate of food before him, so that he eat it. Then she must take some garment of her husband, which is all black, tie a stone in it tightly, and say these words:—"As this stone is bound so that it cannot move, so may my husband, So-and-so, son of So-and-so, be bound in his tongue that it cannot curse me, and in his arms that they cannot hurt me."—*Spectator*.

THE REDWOOD TESTIMONIAL FUND.

Chairman—MICHAEL CARTEIGHE, *President of the Pharmaceutical Society.*

Treasurer—JOHN WILLIAMS, 16 Cross Street, Hatton Garden, London, E.C.

Honorary Secretary—Professor DUNSTAN, 17 Bloomsbury Square, London, W.C.

Object.—"To make some public recognition of the long and valuable services rendered to Pharmacy and to the Sciences connected therewith by Emeritus Professor Redwood."

"The form of recognition to be the foundation of a Redwood Scholarship, held in connection with the Pharmaceutical Society. The surplus, if sufficient, to be appropriated for the purpose of painting a portrait of Professor Redwood, to be placed in the House of the Pharmaceutical Society."

FIRST LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.		£	s.	d.
Abel, Sir F. A., C.B., F.R.S.	3 3 0	Constance, E.	..	..	1 1 0	Harcourt, A. G. Vernon, M.A., F.R.S.	..	..	1 1 0
Abraham, A. C.	2 2 0	Cope, J. A.	..	..	0 10 6	Hardy, Samuel C.	..	..	1 1 0
Abraham, T. Fell	2 2 0	Cooper, A. H.	..	..	0 5 0	Harker, Stagg & Moss	..	..	5 5 0
Abrines, G.	0 5 0	Cooper, H. S.	..	..	0 5 0	Hawkins, L. W.	..	..	0 2 6
Aeland, Sir Henry, K.C.B., F.R.S.	5 5 0	Corder, O.	..	..	3 3 0	Hearon, Squire & Francis	..	..	10 10 0
Adams, Frank	1 1 0	Cortis, A. B.	..	..	2 2 0	Herrings & Co.	..	..	5 5 0
Allan, James H.	1 1 0	Cranwell, W. E.	..	..	0 5 0	Hick, Allan	..	..	0 10 6
Allen, C. B.	3 3 0	Crisp, F. A.	..	..	1 1 0	Hill, Arthur B.	..	..	2 2 0
Amos, D.	0 10 0	Crook, C.	..	..	0 2 6	Hills, Thomas Hyde	..	..	10 10 0
Anonymus	0 2 6	Crookes, W., F.R.S.	..	..	2 2 0	Hills, Walter	..	..	5 5 0
Applegate, E.	1 1 0	Cutting, Thomas J.	..	..	0 10 6	Hinds, J.	..	..	1 1 0
Atkins, S. R.	5 5 0	Davenport, Horace	..	..	2 2 0	Hodder, W. H.	..	..	0 5 0
Attfield, Professor, F.R.S.	5 5 0	Davenport, J. T.	..	..	5 5 0	Hodgkinson, Steaf & Treacher	..	..	5 5 0
Baily, E.	1 1 0	Davies, R. H.	..	..	3 3 0	Hofmann, D.C.L., F.R.S.	..	..	3 3 0
Baily, John	2 2 0	Deck, A.	..	..	1 1 0	Holmes, E. M.	..	..	2 2 0
Bain, Professor Alexander, LL.D.	1 1 0	Dinneford & Co.	..	..	10 10 0	Hopkin, W. K.	..	..	5 5 0
Baker, E. G.	0 5 0	Down, J. Langdon, M.D., F.R.C.P.	..	..	5 5 0	Horncastle, J.	..	..	0 10 6
Baldock, J. H.	1 1 0	Drew, Walter Clark	..	..	0 10 6	Hovenlen, A. C.	..	..	0 2 6
Barber, George	1 1 0	Duncan, W.	..	..	1 1 0	Howard, David	..	..	2 2 0
Barnard, J.	5 5 0	Duncan, Flockhart & Co.	..	..	10 10 0	Howell, Maurice	..	..	0 10 6
Barritt, H., & Son	0 10 6	Dunhill & Stiles	..	..	2 2 0	Howell, William	..	..	0 5 0
Barten, H.	0 10 6	Dunstan, Professor Wyndham R.	..	..	5 5 0	Howe, W. L.	..	..	1 1 0
Battle, J. R.	0 10 6	Dutton & Son	..	..	2 2 0	Hucklebridge, J. W.	..	..	1 1 0
Battle, J. S.	1 1 0	Dyson, W. B.	..	..	2 2 0	Hughes, F. R.	..	..	1 1 0
Barnes, J. Benjamin	3 3 0	Edson, J. L.	..	..	0 2 6	Hunt, Freeman W.	..	..	0 10 6
Barron, F.	10 10 0	Elliott, George	..	..	0 10 6	Hunt, Thomas	..	..	0 10 6
Barron, Harveys & Co.	5 5 0	Farnworth, W.	..	..	1 1 0	Hunter, J. C.	..	..	0 5 0
Bascombe, F.	1 1 0	Farr, E. H.	..	..	1 1 0	Huskisson, H. O., & Sons	..	..	0 5 0
Basker, J. A.	1 1 0	Farries, T.	..	..	5 5 0	Hyslop, J. C.	..	..	1 1 0
Baxter, G.	1 1 0	Field, James J.	..	..	2 2 0	Ince, Joseph	..	..	2 2 0
Beach, Fletcher, M.B., M.R.C.P.	1 1 0	Fitton, R.	..	..	0 5 0	Ince, W. H.	..	..	0 10 0
Beach, James	0 10 0	Fletcher, F. W.	..	..	5 5 0	Jackson, A. H.	..	..	0 10 6
Bell, James, Ph.D., F.R.S.	1 1 0	Fletcher, J.	..	..	2 2 0	Jenkins, Evan	..	..	0 5 0
Benger, F. B.	2 2 0	Flux, William	..	..	3 3 0	Jenner, Sir W., K.C.B., F.R.S.	..	..	3 3 0
Bentley, Professor	5 5 0	Forrest, R.	..	..	1 1 0	Jones & Bowles	..	..	1 1 0
Bevan, C. F.	0 10 0	Foster, W., M.A.	..	..	1 1 0	Jones, H. S.	..	..	1 1 0
Bird, Augustus	10 10 0	Fowler, George	..	..	0 5 0	Jones, Owen	..	..	0 5 0
Birkett, J.	0 2 6	Fox, Wm., & Sons	..	..	2 2 0	Kay, Thomas	..	..	1 1 0
Bishop, A.	2 2 0	Frankland, Professor, D.C.L., F.R.S.	..	..	1 1 0	Kinnimont, A.	..	..	2 2 0
Blunt, T. P.	1 1 0	Frazer, D.	..	..	3 3 0	Kunz, J. I.	..	..	0 5 0
Borland, J.	3 3 0	Freeman, E.	..	..	0 5 0	Lansdown, George	..	..	1 1 0
Borland, J., jun.	2 2 0	Furness, J. M.	..	..	0 10 0	Latham, Professor, M.A., M.D., F.R.C.P.	..	..	2 2 0
Bottle, Alexander	3 3 0	Gadd, Henry	..	..	1 1 0	Lawrence, W. P.	..	..	0 5 0
Bourdas, I.	10 0 0	Gale, S.	..	..	5 5 0	Leech, Miss E.	..	..	1 1 0
Bowen, J. W.	3 3 0	Gamble, Colonel David	..	..	2 2 0	Leech, J.	..	..	0 5 0
Bowerbank, J.	1 1 0	Garrod, A. B., M.D., F.R.S.	..	..	3 3 0	Leigh, Marshall	..	..	1 1 0
Boyce, George	1 1 0	Gerrard, A. W.	..	..	3 3 0	Lister, S.	..	..	0 5 0
Boyce, J. P.	0 10 6	Gibbols, G.	..	..	0 10 6	Lock, S. E.	..	..	0 2 0
Brearey, A. W.	1 1 0	Gibson, Adam	..	..	1 1 0	Lloyd, William	..	..	0 10 6
Bremridge, Elias	5 5 0	Gilbert, Professor, M.A., F.R.S.	..	..	2 2 0	Long, H. H.	..	..	0 2 6
Bremridge, Richard	2 2 0	Giles, R. W.	..	..	2 2 0	Luff, A. P.	..	..	2 2 0
Broad, John Morris	2 2 0	Gladstone, J. H., Ph.D., F.R.S.	..	..	5 5 0	Maben, T.	..	..	1 1 0
Brodie, R.	0 10 6	Goodall, Backhouse & Co.	..	..	2 2 0	Macagan, Douglas, M.D., F.R.S.E.	..	..	3 3 0
Brooke, Sir W. C'Shanganessy, M.D., F.R.S.	3 3 0	Goodwin, John	..	..	1 1 0	MacCrimble, T.	..	..	1 1 0
Bryant, W. J., F.R.C.S.	1 1 0	Gostling, T. P.	..	..	3 3 0	Macfarlan, J. F., & Co.	..	..	10 0 0
Bullock, J. Lloyd	5 5 0	Gostling, W. A., M.D., B.Sc.	..	..	2 2 0	Martin, N. H.	..	..	5 5 0
Burgess, Willows & Francis	3 3 0	Green, J.	..	..	1 1 0	Marsh, Richard	..	..	0 5 0
Burgoyne, Burdighes, Cyriac & Farries	5 5 0	Green, Thomas	..	..	1 1 0	Marsh, Edward	..	..	1 1 0
Burrows, Sir George, Bart., M.D., F.R.S.	2 2 0	Greenhow, E. Headlam, M.D., F.R.S.	..	..	3 3 0	May & Baker	..	..	5 5 0
Bush, W. J., & Co.	5 5 0	Greenish, Thomas	..	..	5 5 0	Martindale, W.	..	..	5 5 0
Butt, E. N.	5 5 0	Greenish, T. E.	..	..	2 2 0	Mead, C. J.	..	..	1 1 0
Caley, A. J.	1 1 0	Griffiths, T.	..	..	0 2 6	Meadows, H.	..	..	1 1 0
Carteighe, Michael	10 10 0	Griffin, Thomas	..	..	0 10 6	Merrikin, J. B.	..	..	1 1 0
Chapman, J. J.	1 1 0	Grimwade, E. N.	..	..	0 2 6	Metcalfe, C. L.	..	..	1 1 0
Chater, E. M.	1 1 0	Groves, T. B.	..	..	1 1 0	Metcalfe, E. H.	..	..	2 2 0
"Chemist and Druggist"	10 10 0	Gull, Sir Wm., Bart., M.D., F.R.S.	..	..	3 3 0	Middleton, Francis	..	..	2 2 0
Christopher, R. G.	0 10 6	Gulliver, W.	..	..	1 1 0	Mond, Ludwig	..	..	2 2 6
Clark, J. A.	0 10 6	Gulliver, W. I. & W. F.	..	..	0 10 6	Morris, D.	..	..	0 2 6
Claudet, F.	5 5 0	Hackman, L. L.	..	..	1 1 0	Mumby, C., & Co.	..	..	1 1 0
Coeker, R. B.	0 10 6	Hall, Ralph	..	..	1 1 0	Naylor, W. A. H.	..	..	3 3 0
Collier, Henry	1 1 0	Hampson, R.	..	..	1 1 0	Nicholson, E. Chamber	..	..	5 5 0
				Hanbury, Cornelius	..	..	5 5 0	Nicholson, W. R.	..	..	0 2 6

	£	s.	d.		£	s.	d.		£	s.	d.
Odling, Professor, M.A., F.R.S...	5	5	0	Shenstone, J. C. ..	1	1	0	Tilden, Professor, D.Sc., F.R.S.	1	1	0
Parkinson, R., Ph.D. ..	1	1	0	Shenstone, W. A. ..	2	0	0	Tingle, J. G. ..	0	5	0
Passmore, F. ..	2	2	0	Shepherd, J. W. ..	1	1	0	Toulminson, G., F.R.S. ..	1	1	0
Payne, Sidney ..	1	1	0	Sherwin, J. ..	0	2	6	Turner, C. E. ..	1	1	0
Perkin, Dr. W. H., F.R.S. ..	2	2	0	Shirley & Son ..	1	1	0	Virgo, C. ..	2	2	0
Perks & Llewellyn ..	1	1	0	Short, F. W. ..	1	1	0	Ward, W. ..	1	1	0
Perry, George E. ..	0	10	6	Siebold, Louis ..	1	1	0	Walker, Charles ..	0	5	0
Pierce, R. W. C. ..	0	10	6	Silverlock, H. ..	2	2	6	Walker, Henry ..	1	1	0
Pitman, James ..	1	1	0	Slater Thomas, jun. ..	1	1	0	Wallworth, D. ..	0	10	6
Pitman, Sir Henry, M.D., F.R.C.P.	2	2	0	Smith & Co. ..	3	3	0	Want, W. P. ..	0	5	0
Plowman, Sidney, F.R.C.S. ..	1	1	0	Smith, John J. ..	0	10	6	Warren, W. ..	0	10	6
Pochin, H. D. ..	10	10	0	Smith, Samuel A. ..	1	1	0	Warwick, F. W. ..	1	1	0
Prior, G. T. ..	1	1	0	Smith, William ..	1	1	0	Waterall, G. E. ..	1	1	0
Radley, W. V. ..	2	2	0	Smith, William ..	1	1	0	Watts, J. M.A., D.Sc. ..	5	5	0
Ragg, W. W. ..	0	5	0	Stroud, J. ..	0	10	6	Watts, W. Manning ..	3	3	0
Randall, W. B. ..	2	2	0	Sullivan, C. O., F.R.S. ..	1	1	0	Webb, E. A. ..	2	2	0
Ransom, F. ..	1	1	0	Southall Bros. & Barclay ..	5	5	0	Wells, Sir Spencer, Bart., F.R.C.S.	2	2	0
Ransom, W. ..	2	2	0	Southall, William ..	1	1	0	West, J. L. ..	0	5	0
Rees, G. Owen, M.D., F.R.S. ..	2	2	0	Southall, W. F. ..	0	5	0	Westover, J. T. ..	1	1	0
Reynolds, R. ..	2	2	0	Spencer, C. ..	1	1	0	Whysall, W. ..	2	2	0
Riley, P. ..	0	2	6	Spiller, John ..	1	1	0	Wigg, H. J. ..	0	10	6
Robbins, John ..	5	5	0	Spilsbury, J. ..	1	1	0	Wild, J. ..	0	5	0
Roberts, W. R. ..	0	5	0	Starkie, R. S. ..	1	1	0	Williams, E. ..	10	10	0
Roberts-Austen, Professor Chandler, F.R.S. ..	2	2	0	Stocken, J. ..	5	5	0	Williams, John ..	2	2	0
Robinson, J. ..	0	10	6	Squire, A. H. ..	5	5	0	Wilkinson-Newsome, G. T. ..	0	10	6
Robinson, R. A. ..	3	3	0	Squire, Peter W. ..	5	5	0	Wilkinson, W. ..	0	5	0
Roscoe, Sir H. E., M.P., F.R.S. ..	1	1	0	Sutton, Francis ..	1	1	0	Wilson, Albert ..	0	10	0
Rue, Warren de la, D.C.L., F.R.S. ..	5	5	0	Symes, Charles ..	3	3	0	Wilson, R. E. ..	5	5	0
Sainsbury, A. F. & L. F. ..	1	1	0	Symes & Co. ..	3	3	0	Woolley, G. S. ..	5	5	0
Sandford, G. W. ..	5	5	0	Symons, W. H. ..	3	3	0	Woolley, H. ..	0	10	6
Savage, W. D. ..	1	1	0	Taylor, G. S. ..	3	3	0	Wright, A. ..	0	2	6
Sangster, John G. ..	1	1	0	Tanner, A. E. ..	2	2	0	Wright, H. C. ..	5	5	0
Sarsfield, William ..	1	1	0	Thomas, Horace ..	1	1	0	Wright, Layman & Unney ..	3	3	0
Saunders, Sir Edward, F.R.C.S. ..	2	2	0	Thomas, H. A. ..	2	2	0	Wylie, W. F. ..	0	10	0
Savory & Moore ..	5	5	0	Thomas, H. Parry ..	0	5	0	Wynn, Frederick ..	2	2	0
Schacht, G. F. ..	3	3	0	Thomas, R. ..	0	2	6	Yates, Francis ..	1	1	0
Semple, R. H. ..	1	1	0	Thompson, G. A. ..	0	10	6	Young, J. Rymer ..	1	1	0
Senior, A. M.D. ..	1	1	0	Thresh, J. C., D.Sc. ..	2	2	0	Young, R. Fisher ..	0	10	6
Sharp, James ..	1	1	0	Thrower, E. A. ..	0	10	6	Young, W. C. ..			
				Tichborne, Professor C. R. C., LL.D. ..	1	1	0				



ON SALE OR RETURN.

IN the Queen's Bench Division of the High Court on Monday, a question in reference to the supply of goods on sale or return came before Mr. Justice Mathew and Mr. Justice A. L. Smith, in the case of *Jacobs v. Harbach*, the plaintiff appealing from the decision of the County Court Judge at Sheffield. The plaintiff (*Jacobs*) is proprietor of some remedial application for horses, and he sent out a circular from Sheffield to shopkeepers in various parts of the country inviting them to be his agents for the disposal of his horse medicine, and to receive a supply of it "on sale or return." "In consequence" (ran the circular) "of orders from your district for our remedy, we have decided to appoint agents for the disposal of it, and shall be pleased to appoint you an agent (in Worcester), and to send you a quantity on sale or return for six months, which will give you a good opportunity of testing its value in the market." Accordingly, on April 10 a quantity of the medicine was sent by the plaintiff to the railway station at Sheffield for transfer to the defendant (*Harbach*) at Worcester, where, however, the medicine did not arrive till April 16. He kept it for six months, and then finding no buyers for it, he, within six months from October 16, just over six months from the 10th, returned it to the plaintiff, who, however, refused to receive it back, asserting that the six months had elapsed, as he insisted on reckoning the period from the time he despatched the goods. The Worcester tradesman declined to pay, and was summoned in the Sheffield County Court, where the Judge, however, decided in his favour, and observed that a great part of his time was taken up with hearing such cases, the wholesale dealers who sent the goods always relying on the point taken in this case by the plaintiff, that the six months must be reckoned from the time the goods are sent to the railway. The plaintiff, the wholesale dealer, appealed from that decision.

Mr. Amphlett appeared for the defendant, and argued that the County Court Judge was right, as the tradesman was entitled to six months to test the market value of the medicine, and therefore the six months must be reckoned from the time he received it, not the time when it was sent off by the plaintiff.

Mr. Lyden Bell, on behalf of the Sheffield vendor, argued that the well-known rule assumed that delivery to a carrier for a customer was delivery to the customer, as the goods would be sent at his risk, and so the six months must be reckoned from the time the goods were received by the railway company.

Mr. Justice Mathew, however, said that though this was the rule generally applicable, it did not apply to cases such as this, of goods sent "on sale or return," where, as in the present case, it appeared to have been intended that the customer should retain the goods for six months in order to test their market value. That, he thought, plainly implied that the customer was to have the goods for six months from the time he received the goods, so that if he returned them within that time it was sufficient, and here it was so. The County Court Judge therefore was right.

Mr. Justice A. L. Smith concurred.

Appeal dismissed.

LONDON BANKRUPTCY COURT.

Re JOHN DRUMMOND, 6 George Yard, Fenchurch Street, and Southend, Essex, Drug Merchant.

AT the London Bankruptcy Court on Wednesday, an application was made to Mr. Registrar Brougham to grant a receiving order against the estate of this debtor. The amount of the liabilities and assets did not transpire. His Honour made the usual receiving order and appointed the public examination for May 7.

JOHN FORSYTH JOHNSTONE, 260 Burdett Road, 3 Bow Common Lane, and Belvedere, Chemical Manufacturer.

THE first meeting of the creditors under this failure was held before Mr. Stewart, an Assistant Receiver, on Wednesday. The failure took place on February 16 last, the receiving order being made on the debtor's own petition, and the statement of accounts produced showed total liabilities

35,082*l.* 0*s.* 11*d.*, debts fully secured 3,153*l.*, unsecured 19,589*l.* 10*s.*, partly secured 12,100*l.*, as against assets, cash 25*l.*, stock in trade 550*l.*, plant, machinery, horses, vans, &c., 20,048*l.* 4*s.*, other property making total assets, 20,680*l.* 10*s.*

On February 19, Mr. W. G. Cooper, 1 Fenchurch Avenue, merchant, one of the principal creditors, was appointed special manager of the estate. The debtor, who is also a manufacturer of fish guano and other artificial manures, stated in his preliminary examination that he commenced business in 1872 with a small amount of capital of his own, and has since from time to time borrowed money for the purpose of establishing and extending his business. In reply to questions at this meeting, the debtor stated that he commenced business in 1872, and that ever since the year 1873 he has carried on business at his present factory. He had kept proper books of account, those kept previous to 1884 being now at the factory. The total value of the plant at Belvedere was about 15,000*l.* At Christmas last his liabilities amounted to about 34,000*l.* At that time he was insolvent. The whole of his stock and plant, &c., was valued in 1885 at 32,000*l.* The valuation was made by Messrs. Middleton and Messrs. Tiser jointly, with a view to turning the business into a company. Since May, 1884, when his affairs showed a surplus of 5,000*l.*, he had laid out about 2,000*l.* upon his business. A scheme of arrangement was submitted on behalf of the debtor for the payment of a composition of 5*s.* in the pound, 2*s.* down, and the balance, unsecured, in three yearly instalments of 1*s.*, the first being payable two years hence. The offer was accepted after some discussion. Appended is a list of the principal creditors:—

	£	s.	d.
Allen, F., & Sons, Bow Common Lane	10	18	9
Anderson, Hugh J., Fenchurch Avenue	1,003	16	3
Blott, J. & J., & Co., Crisp Street, Poplar	204	18	7
Coward, C., Turners Road, E.	50	0	0
Cooper, McCaigine, & Co., Fenchurch Avenue	3,761	3	6
Lawson, F. G., Queen Victoria Street	31	14	0
Farrow, A. H., Commercial Street, E.	52	14	6
Light & Co., Essex Road, Old Ford	18	15	0
Milne, John, Inverurie, N.B.	2,162	17	11
Musto, Wm., & Co., engineers, Whitechapel	2,541	3	0
Montgomery & Co., Mark Lane, E.C.	535	1	2
Parry, Hugh R., Norwich	2,877	13	0
Chaple, Chas., Burdett Road	700	6	0
Edwards, C., & Sons, Great Sutton Street	232	15	2
Harrison, James, Stratford	279	19	10
Harrison, John, King's Cross	176	18	8
Hunt, John R., Burdett Road	675	0	0
Johnstone, Major, Mar Street, Alloa, N.B.	400	0	0
Manlove, Allott & Co., Queen Victoria Street	452	14	1
Pounds, J., & Sons, Bow Common Lane	593	17	5
Ruston, J., Bromley-by-Bow	181	15	0
Stewart, Mary Ann, Newington Green	530	0	0
Wiseman, G., North Street, Poplar	152	9	9

WALTER TUDOR, 30 Fernoy Road, Harrow Road, Paddington, trading as "Tudor & Co." Perfumer.

THE first meeting of creditors under the failure was held on Monday before Mr. Wildy, the Assistant-Official-Receiver. The failure took place on March 24, and the accounts show unsecured liabilities 192*l.* 6*s.* 1*d.*, against assets 3*l.* There was no quorum present, and the debtor having no offer to make signed his consent to adjudication. Annexed is a list of creditors:—

	£	s.	d.
Toogood, Wm., 35 Mount Street	49	8	7
Evening News, Whitefriars Street	44	16	0
Pictorial World, Strand	30	0	2
Fell & Bryant, Glasshouse Yard, Aldersgate Street	15	18	1
Tinplate Decorating Company, Neath	10	17	8

W. H. H. DAY, Grove Vale, East Dulwich, and Peckham Rye, Physician and Surgeon.

THE accounts filed by this debtor have just been issued in a summarised form by the Official Receiver. They show gross liabilities of 2,362*l.* 7*s.* 11*d.*, of which 2,147*l.* 17*s.* is expected to rank against assets of 141*l.* 5*s.* 1*d.* The Official Receiver reports in reference to this that the debtor states that during 1882 and 1883 he was engaged in speculation in land in

Manitoba, Canada, by which he has lost upwards of 7,000*l.*, and that in March, 1884, he purchased and commenced his present practice with money which he borrowed. That he has kept a day-book and patients' ledger, but has not kept a proper cash-book, a creditors' ledger, expenses accounts, or accounts relating to his land speculations; consequently, his books do not sufficiently disclose his transactions and financial position; that he estimates the realisable value of the goodwill of his practice at 100*l.*; and that he is possessed of certain lands in Manitoba, but that these are subject to mortgages, and the equities of the properties are not considered by him to be of any present value; also a plot of land at Winnipeg, which is stated to be unsaleable and of no present value. The Court has made an order for the summary administration of the estate.

TRADE-MARKS APPLIED FOR.

THE *Trade Marks Journal* publishes the following notice:—"Any person who has good grounds of objection to the registration of any of the following marks may, within two months of the date of this journal, give notice in duplicate at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1883, of opposition to such registration." All communications relating to patents, designs, or trade marks to be addressed to H. Reader Lack, Esq., Comptroller-General of Patents, Designs, and Trade-marks, Patent Office, 25 Southampton Buildings Chancery Lane, London, W.C.

From the "Trade Marks Journal," March 17, 1886.

LABELS FOR FRUIT ESSENCES. Applications by W. J. Bush & Co. (1.) A five-inch square label with three medals (obverse and reverse) on each side, and copy of autograph of the firm obliquely placed on label, and the words "International Exhibitions, London, Paris, Vienna, Sydney, and Melbourne," in bold letters on top, and space for name of essence at bottom. (2.) An oblong label of same description with eight medals. (3.) A stopper-hand with four medals and autograph. (4.) Small label with words, "Refined Lime Juice and Orange Cordial," with figure of two pendant fruits and leaves. (5 and 6.) Engraved label with six prize medals and signature of firm. And another label (7 and 8) with engraving of works and warehouses, and gold medals both for above ESS. BLUE RIBBON ALE. Feb. 25, 1885. 43,132/40.

TWO PILARS AND DRAPERY, with word "Spirone" thereon; for inhalants for human use. The Dr. J. F. Churchill's Inhalants Company (Limited), 74 Gresham House, Old Broad Street, London. Nov. 5, 1885. 43,640.

LABEL, with reclining figure of child, and words, "Pet Brand"; for condensed milk. The Condensed Milk Company of Ireland, Lansdowne, Limerick. Nov. 11, 1885. 43,778.

LABELS (three), with adaptations of dark and light triangular forms as background; for mineral and aerated waters, including soda-water, lemonade, and ginger-beer. R. White & Sons, Cunard Street, Camberwell. Nov. 13, 1885. 48,853/55.

LABEL; black background and white letters, with words "Cuticura Soap," &c.; for soap (toilet or perfumed). The Potter Drug and Chemical Company, Boston, Mass., U.S.A. Nov. 13, 1885. 43,974.

"RYLANDS' GEM;" for glass bottles, except gum bottles. Dan Rylands, Barnsley, Yorkshire. Dec. 8, 1885. 49,431.

LABEL, with foliage design at each end, and letterpress regarding Rongier's Marrow Pomade; for pomade. E. H. Tibbetts, 67 Bull Street, Birmingham. Dec. 9, 1885. 49,451.

TWO nude children carrying tub, with words, "HEALTH SOAP"; for common soap. Health Soap Company (W. Bolton), Exchange Buildings, Bromley. Jan. 5, 1886. 50,020. Same for toilet soaps. 50,021.

"RAINBOW BRAND;" for petroleum and other oils. Bigland, Sons, & Jeffrey, Exchange Buildings, Liverpool. Jan. 7, 1886. 50,078.

"FRANKLIN'S CHEMICAL INK;" for ink. R. F. Franklin, 59 St. James's Road, Brixton, S.W. Jan. 11, 1886. 50,180.

"LAXOLINE;" for perfumery and chemical substances. Burns, Jaffe, & Darmstadter, 16 Salzfaer, Charlottenburg, near Berlin. Jan. 11, 1886. 50,210 and 50,215.

"PETROLUEKINE;" for mineral fats. Southall Bros. & Barclay, Birmingham. Jan. 12, 1886. 30,222.



RECEIVING ORDERS.

JAMES, GEORGE ROBERT, Sydenham, veterinary surgeon and farrier. Examination April 9, at Greenwich.

SUTHERLAND, WILLIAM, Southampton Row, London, patent medicine vendor. Examination, April 13, 11.30.

THACKER, R., New Street Square, London, E.C., trading as "Henry Thacker & Co." (lately trading at Birmingham and Manchester), ink manufacturer. Examination April 20, 11.

FIRST MEETING.

BRAITHWAITE, D., Barrow-in-Furness, ginger-beer manufacturer. March 31, at the Official Receiver's Office. Barrow-in-Furness. Ulverston and Barrow-in-Furness Court.

PARTNERSHIPS DISSOLVED.

BEARDSLEY, J., & H. S. BAL, Nottingham, chemists.

SCHÜTTE, J. S., & E. H. OLDENDORF, Mark Lane, London, E.C., drug merchants.

UNSWORTH, R. H., & Co., Manchester, oil merchants and oil agents.

NOTICES OF DIVIDENDS.

BROOKS, WALTER REGINALD, & ATTIEWELL, ARTHUR, Liverpool, aerated-water manufacturers, trading as "Brooks & Co." First dividend of 3s. 6d., any day, at Mr. G. Mahon's, 26, North John Street, Liverpool.

DEWAR, JAMES, Liverpool, mineral-water manufacturer, &c. First and final dividend of 10½d., on March 15 at Official Receiver's Office, Liverpool.

ADJUDICATION.

QUEENEOROUGH, JOHN, Boston, chemist and druggist.

Trade Report.

MINCING LANE, March 18.

SEVERAL parcels of drugs were exposed for sale this week, the destination of which it would be important to trace. Beginning with the drugs of better qualities, some fine quilled red bark must get the first place. One parcel (ten cases) of original stem-quill was composed of magnificent pieces not less than 18 inches long and 1½ inch in diameter. This was as fine-looking bark as could be desired, and showed careful husbanding. Almost as fine were nine cases of quill, equal in length but not so regular as the first parcel. These were both from Ceylon. The best lot was bought in at 1s. 3d. per lb., and the other sold at 1s. Eighteen bales of Java quill were also put up, but did not sell. This was an ordinary lot; but these continually recurring sales of cultivated quill bark compel us to think that the Pharmacopœia authorities are not far wrong after all. We noticed in one sale-room an exceptionally fine specimen of Indian hemp, from Liverpool. This was a clean and well-preserved specimen, composed of the flower-tops and an inch or more of the stalk, the whole tied into a bunch. Beside it were other two specimens of the same drug—one an ordinary commercial sample, the other a coarse powder. In the same sale-room was exposed a lot of very bold Chinese galls, which showed well the conformation of the excrescence. Some of the galls were about 3 inches long and 4 or 5 inches in diameter. The cardamoms shown this week were almost uniformly good in colour and plumpness, and very large quantities were put up and sold readily at prices under noted. Large quantities of wax and honey were again exposed; the greater part of the honey (Californian) had the usual amount of dead insects, wood, &c., which proclaim its genuineness (!), and some of the wax was clean and fit for sale. There was exposed in one sale-room a substance which appeared to be yellow wax, the price by private sale only 52s. 6d. per cwt. But the maker has not yet caught the wrinkles of his art, and had forgotten to disguise the paraffin odour, which was quite perceptible. A parcel of twenty-one bags of Carnauba wax, almost destitute of green colour, was exposed. A lot of ergot, amounting to nearly 5½ tons, was

bolder than we have seen in the market for some time, but it was somewhat damp. It did not find a purchaser, although another lot smaller in the grain sold readily.

It is a pity some philanthropic person cannot find a use for Japan Star anise: it continually turns up, and no one will take it in. This week 66 cases were brought forward, and, as if to keep it company in neglect, 10 cases of camphor oil were exposed with it. The oil was of the dark kind which has no camphor in it, and will not sell to retailers.

Three bales of cinnamon leaves, in good condition, were noticed as a rare visitor to our markets. The gums and gumm-resins shown were the usual mixed lot. There were a few lots of very good myrrh, but many were of wretchedly bad stuff, composed mainly of wood and earthy matter with a coating of the gum-resin; and classed amongst myrrhs was a lot (15 cwt. altogether) of bdellium, a substitution which is somewhat common in Mincing Lane. Of ammoniacum one parcel was composed almost wholly of fine cream-coloured tears, and one package of galbanum was a good hard gumm-resin, plentifully besprinkled with large white tears.

One firm announces for sale on March 23 a "direct arrival" lot of 57 cases of Java cinchona bark, and "druggists' quills," mostly of quills 3½ feet long.

Probably animated by the better tone lately apparent in our markets, holders had brought forward for sale on Thursday such a quantity of goods that only fourteen out of the total of nineteen catalogues could be disposed of, the remainder of the sales being postponed until this day (Friday) at 11 A.M. Subjoined details apply to Thursday's sale; if any important variations occur on Friday they will be noted in a postscript. So far the better feeling evinced at the last auctions has been well maintained, and nearly all articles in which sales were effected showed a steady market, the only important exception being aloes, which were slightly easier.

ACIDS.—Citric firm at 2s. 2½d. per lb. on the spot; and 2s. 3d. for forward delivery, although the manufacturers still maintain their price of 2s. 4d. per lb. In sale 1 cask sea-damaged realised 2s. 1½d. per lb. Tartaric a little easier, English at 1s. 9½d., foreign at 1s. 9d. per lb. Three casks put up for sale to-day are held at the latter price.

ALOES.—The 405 packages advertised for sale were composed almost entirely of *Curaçao* and *Cape*, the price for the latter variety declining about 6d. to 1s. per cwt. Of 49 kegs *East India*, 10 kegs good Socotrine realised 7l. 57 cases *Cape* were sold at 32s. 6d. for fine hard, 27s. 6d. to 30s. for fairly good to good, and further down to 19s. for low drossy quality. 28 boxes *Curaçao* sold without reserve, bringing from 21s. to 30s. per cwt. for low to medium dark liver; 49 other packages, composed of bags, gourds, and tins, realised 36s. to 60s. per cwt., while 17 boxes good darkish liver are held at 45s. per cwt.

ANNATTO.—The 122 baskets roll annatto which arrived too late to be included in the last sale were offered to-day and sold rapidly: 30 baskets good bright soft at 1s. 1d. per lb., 6 ditto ditto at 1s. 2d. per lb., 65 baskets fair quality at 8d. to 9½d. per lb., and 21 baskets dull and dark-coloured at 5½d. per lb.; 8 packages good bright seeds were also disposed of at 5d. per lb., and 20 packages seeds and paste bought in, the former at 9d. per lb., the latter at 2s. to 2s. 6d. per lb.

ANISEED.—5 bags Maltese sold at 30s. without reserve. Of Russian 36 bags partly fair quality but mixed with coriander, partly mouldy and dusty, all bought in or withdrawn. A parcel of 44 bags shipped from Marsilles is held at 29s. The Japanese star aniseeds continue to make their appearance, but the 66 cases offered to-day had to retire unsold.

ANTIMONY remains neglected. 50 boxes crude Japanese found no buyer at 17l. 10s., the price asked, although a bid of 17l. was refused.

BALSAMS.—*Capivi* remains neglected, 8 packages all being withdrawn or bought in. *Tolu*.—To-day only 5 cases were brought forward, and bought in at 1s. 6d. per lb. *Peruvian*.—6 cases bought in, not meeting with any offer.

BARK.—In all 230 packages were catalogued, but of this quantity nearly one-half stands over until Friday. The sales affected this day consisted of 15 bales *Lima*, thin to medium quill at 6d. per lb., and 6 cases *Ceylon succirubra*, in

thin to medium quills of good appearance, at 1s. per lb. Ten cases of the same variety, but in much stouter and more silvery quill, were bought in, and are held at 1s. 1d. per lb. A parcel of 9 packages *red bark*, quills (partly very thin) and flat mixed, was bought in at 1s. 6d. to 3s. 6d. per lb., and one of 14 bales flat yellow *Calisaya* at 2s. 2d. to 2s. 10d. per lb.

BUCHA LEAVES.—Of 20 bales, 3 long narrow variety, but externally stained, are held at 9d. per lb., a bid of 8½d. being refused; and 6 bales short round leaves were sold at 2½d. per lb. The rest bought in at nominal value or withdrawn.

CANNABIS INDICA.—116 packages of this article were catalogued, but none found a buyer; the only parcel worthy of particular notice consisted of 3 cases of exceptionally fine quality, put up in small bundles, for which 1s. was refused, and which is nominally held at 1s. 3d. to 1s. 4d. per lb.

CARDAMOMS.—The liberal supply of 417 packages, nearly all cultivated Ceylon, met with a good inquiry, and prices were steady throughout. The competition for *Mangalore* was comparatively slack, than that for other varieties, but yet 3s. was paid for one fine lot, and 2s. 6d. to 2s. 9d. for several others; *Malabar* character sold at 3s. 3d. for fine plump pale pods; 2s. 6d. to 2s. 9d. for medium to bold well-filled pods; 1s. 3d. to 1s. 9d. for small to medium brownish; 1s. for small shrivelled brown; 6d. to 9½d. for low to partly open and unsightly; uncultivated *Ceylon* sold at 11d. to 1s. 3d. for fair to very good; 5d. to 1d. per lb. for low to very common. *Seeds* fetched 1s. 1d. to 1s. 6d., according to quality.

CASCARILLA.—Of 95 packages 22 sold, first to third class sea-damaged at 24s. to 26s. per cwt.

CASSIA OIL.—10 cases of very good oil failed to sell, but it was amazing how eagerly buyers bid for a single bottle of settlings, which ultimately sold at 1s. 6d. per lb.

CHILLIES.—31 bags Zanzibar withdrawn.

CINNAMON LEAVES.—3 bales bought in, nominally at 10s. per cwt.

CINNAMON OIL.—24 bottles of good pale excellent aroma, sold at 1s. 9d. per oz.

COLOCYNTH.—Only one lot of five cases put up. It was broken Spanish fruit, of fair quality, but very seedy, and brought 7d. a pound.

COPAL.—Siftings, low stony and coarse, sold at 18s. 6d., and low dark block at 34s. 6d., chips at 24s. 6d.

CROTON SEED.—Between 80 and 90 bags and barrels were offered: some was of excellent quality, but only one barrel was sold, at 20s. per cwt. This was the worst lot exposed for sale; it was decorticated and otherwise damaged.

CUBEBS remain very scarce; a parcel of 10 bags, fairly good quality, but containing a goodly admixture of stalks, sent over from Rotterdam, is held at 15l. 10s., an offer of 15l. being declined.

DRAGON'S BLOOD.—Three cases of good small sold at 9l. 5s. per cwt.; three cases of blocky, good bright colour, at 7l. 17s. 6d.; and three of damp cakes (otherwise good) at 6l. 7s. 6d.

ERGOT OF RYE.—A lot of small in good condition sold at 1s.

GAMBOGE.—Only one case, partly dark-coloured, drossy and blocky, was sold at 11l. 12s. 6d.

GENTIAN ROOT.—23 bags grey sold at 15s., and 4 bales good quality at 16s. per cwt.

GUM ARABIC.—Of 119 packages only 24 were sold, viz., 11 bales *Turkey* sorts at 8l. 12s. 6d. to 9l. 7s. 6d., and 13 packages *Cape*, good pale, but rather dusty, 82s. 6d.; very blocky, partly dark, 50s.; low blocky and dark mixed at 44s. per cwt.

GUM ASAFOETIDA.—3 cases sold at 35s. per cwt.

GUM AMMONIACUM.—27 cases were offered, but did not meet with any inquiry; 4 cases pale fine sorts are held at 50s. per cwt, while for 1 case good clean siftings 18s. is asked.

GUM BENJAMIN.—A large supply, amounting altogether to 246 cases was brought forward, but a great part consisted

of very common, or fourth, *Palembang*, for which no buyer appeared; 6l. 17s. 6d. was paid for second *Penang* of ordinary quality, and badly false packed; 7l. 15s. to 10l. 7s. 6d. for second *Sumatra*, fairly good almondy, but false packed, to fine almondy, and 35l. for a single case of very fine *Siam* in bold loose almonds.

GUM MYRRH meets with good inquiry and commands steady rates for *Aden* sorts. In all 68 packages were catalogued, sorts selling at 5l. to 7l. 10s., according to quality; good coarse siftings at 83s.; dusty siftings at 40s.; low and woody garblings at 38s. 30 bales *bdellium* were bought in at 45s. to 60s., the owner declaring himself anxious to sell and willing to take less.

HELLEBORE.—21s. was refused for a lot of slightly mouldy root.

HONEY.—Large quantities of Californian changed hands at from 18s. to 26s.

IPECACUANHA.—Only 21 serons were brought forward, part of which sold at about previous values, viz., 3s. 7d. to 3s. 9d. for good annulated, and 4s. to 4s. 2d. for picked root.

LIQUORICE.—About 2 tons of root as dry as tinder and thick very low quality sold very quickly at 5s. 6d. per cwt.

MUSK met with fair inquiry at about previous values. *Tonquin*, *Pile I*, fine bold thin skin and underskin, at 70s. 6d. to 72s. *Pile II*, false-packed, hard and genuine, but skinny medium pods, 30s. to 32s. 6d. *Pile III*, good yielding hard skinny, 29s. 6d. Four tins ordinary sold at 17s. to 18s. Twelve bottles of low, mouldy Calcutta grain, for which 25s. was bid, are held at 35s. per cz.

MUSK SEED.—Of 15 packages 4 sold at 10d. to 11d. per lb.

NUX VOMICA.—102 packets good bright quality from Calicut sold at 11s. 6d. per cwt.

OPIMUM.—2 cases Mozambique in balls of good appearance, containing, according to analysis, 9.1 per cent. morphia, sold at 7s. per lb.

ORANGE PEEL.—Of 69 packages a few sold at 3½d. to 1s for Malta narrow, according to quality.

PETROLEUM OIL is easier in all positions: spot 5½d. to 6d.; September-December 6½d. sellers. *Water White* has advanced to 8½d. owing to scarcity: September-December 8½d. The deliveries since January 1 have been 184,933 barrels, against 144,384 barrels same time last year.

RHATANY ROOT.—17 bags were offered. This quality was very poor and woody; 5 bags of it were "second class sea damaged," and this fell to one buyer for 1½d. per lb. The same buyer bought the rest for 2½d.

RHUBARB.—The price of this article remains unchanged. 118 chests were brought forward, of which the smaller half was sold, partly without reserve, low wormy *high-dried* at 9d. per lb. *Canton*, low country damaged, 9d.; small to bold round root, rather dark-coated and touched with worm, at 10½d. to 11½d.; small round and flat mixed, partly unsightly and woody, 1s. 1d.; good bright root, middling to bold pieces, flat or round, at 1s. 4d. to 1s. 6d. per lb. *Shensi*, low pickings, 1s.; inferior root, spongy and of unsightly appearance, 1s. 2d.; small round root, partly darkish exterior, 1s. 9d.; middling to bold, fairly bright-coated, two-thirds good pinky fracture, at 2s. 3d. to 2s. 7d. per lb.

ROSE LEAVES from Bombay were again offered in small quantities, viz. 23 bags, but found no buyer.

SARSAPARILLA.—Of this article a large supply of many varieties was brought forward, of which by far the greater part failed to find purchasers at auction, but what little was sold brought about previous values, viz. 1s. 6d. to 1s. 6½d. for grey Jamaica and 5d. for rather ordinary Mexican. A few packages of loose Honduras are held at 1s. 9d. per lb.

SENNA, of which 125 packages were catalogued, brought very full prices indeed, and a further advance is anticipated; it was, in fact, stated in different quarters that holders would have done well to keep back supplies, as nothing is coming in, and the buyers are said to be almost entirely out of stock. One bale very fine bold green *Tinevely* leaves, slightly sea-damaged, realised 1s. 1½d. per lb.; fair, rather discoloured, to fine bold leaves, all more or less sea-damaged, 4¾d. to 10d.

SQUILLS.—Some 15 bags were sold, the best fairly good,

bright at $2\frac{1}{4}d.$ and $2\frac{1}{2}d.$ A darker coloured lot at $1d.$ and 1 bag of sea-damaged at $\frac{1}{2}d.$ per lb.

SULPHATE OF AMMONIA is now quoted at good grey 24 per cent., f.o.b. Hull, $12l. 2s. 6d.$ less $2\frac{1}{2}$ per cent. Good grey 24 per cent., f.o.b. Leith, $12l.$ less $2\frac{1}{2}$ per cent. London makes on basis of $25\frac{1}{2}$ per cent., $12l. 2s. 6d.$ to $12l. 5s.$ net. Messrs. John Angus & Co. state that this very important improvement in the market has been brought about by various circumstances. The stocks have been very strongly held, there has been a very active demand from Belgium and the North of France, and the home consumption has been exceedingly good; at the same time there have been considerable purchases to cover sales already made. Although the season has been very adverse to agricultural operations, it is quite possible that the lateness of the season and the backwardness of the crops will encourage a still larger consumption; but this remains to be seen.

TAMARINDS sold from 9s. to 11s. per cwt. for common to fair East India.

TONQUIN BEANS.—Eleven cases were offered by one firm, and three of Para kind were sold at $1s. 9d.$ per lb. The rest were bought in at from $1s. 8d.$ to $2s. 3d.$

TURPENTINE is rather firmer. American spirit, spot 30s. 6d. April 30s. 6d.; September-December 27s. 3d.

VANILLOES.—The 229 tins offered in auction were nearly all sold at higher rates, exceeding in many instances by 2s. to 3s. those paid in the previous sales. The prices paid were 20s. to 24s. for $7\frac{1}{2}$ to 8 and 8 to $8\frac{1}{2}$ inch; 16s. 6d. to 18s. for 7 to $7\frac{1}{2}$ inch; 10s. 6d. to 14s. for $5\frac{1}{2}$ to 6, $5\frac{1}{2}$, 6 and 6 to $6\frac{1}{2}$ inch; 7s. for 4 to 5, 5 and $6\frac{1}{2}$ to 7 inch; 2s. 6d. to 3s. for 4 to $5\frac{1}{2}$ inch; all according to quality.

WAX.—Bees'. A good supply of 247 packages Jamaica, Mauritius, Madagascar, Benguela, Mogadore, and Calcutta was offered, but excited very little attention, and but few were sold, viz., 10 barrels Jamaica, good, at $6l. 12s. 6d.$ to $6l. 10s.$; damaged, at $6l.$; and rather dark at $5l. 15s.$; 7 casks Mogadore at $5l. 5s.$; 33 cases Mauritius at $9l. 1s.$ to $10s.$; and 5 cases Madagascar at 9s. 9 casks Mogadore are held at $5l. 7s. 6d.$, and 44 bales Benguela, $\frac{1}{3}$ part good yellow, $\frac{2}{3}$ darkish at $5l. 15s.$

YLANG-YLANG.—The unusually large number of 84 bottles, chiefly of inferior and medium qualities, did not create any interest, and the whole supply remained in owner's hands. We have recently had occasion to inspect some exceptionally fine Ylang of a mark which, we believe, has not so far been seen on our market, and which is held at 18s. per oz.

POSTSCRIPT.

MENTHOL.—At the sales to-day (Friday) a considerable quantity of menthol was offered and sold without reserve at 10s. 3d. and 10s. 6d., a fall of 4s. or 5s. for the quality. It was said to be bought by speculators, who now ask 12s. 6d. or it. The stock here is very large, and it is generally believed that the demand is somewhat slackening.

CITRIC ACID has also declined at the last moment, and was quoted at 2s. $1\frac{1}{2}d.$ for spot on Change this afternoon.

POISONING BY PARAFFINUM MOLLE.—Vaseline has been administered internally without bad results. Some of its substitutes are poisonous, and Dr. H. S. Robinson reports three cases of poisoning by a "British Pharmacopœia preparation." It would be interesting to learn what was the preparation in question.

VIBURNUM PRUNIFOLIUM.—Dr. W. Macfie Campbell, of Liverpool, gives a favourable report (*British Medical Journal*, February 27) on *Viburnum prunifolium* as a remedy in the prevention of miscarriage. The solid extract, prepared by evaporation from the commercial liquid extract, is administered as a pill in two-grain doses. This form is preferred to a liquid preparation. *Viburnum prunifolium* is the blackthorn of the United States, where it grows abundantly as a tall shrub east of the Mississippi. The bark is official in the U.S.P., as also a fluid extract of the same.

THE AMERICAN DRUG MARKET.

(From our Correspondent.)

NEW YORK, March 9.

THE drug trade has participated in the improvement in business which has been steadily progressing throughout the country, and the trade generally are confident in the belief that, with the season further advanced, an active market, with improved prices, will be experienced.

The prices sterling (in parentheses) are what the different articles would cost delivered in London, all market allowances, discounts, &c., being taken into account. Importers can, therefore, see at a glance the course of this market compared with their own.

BALSAMS.—The market for *Copaiba* has decidedly improved, Maranham especially being so scarce that purchases for this market are said to have been made in London, price here for filtered 34c. (1s. $6\frac{1}{2}d.$). Maracaibo has ceased to arrive, and is also dearer at 32c. (1s. $5\frac{1}{2}d.$). *Tolu* continues very weak, owing to total absence of inquiry; nominally the market is 32c. (1s. $5\frac{1}{2}d.$). *Peru*.—Some more direct arrivals have taken place, but the market is firm at \$1.30 (5s. $11d.$).

Direct Arrivals of Balsams in New York for 1885.

Copaiba, Para and Maranham ..	85,000 lbs.
Maracaibo and Cartagena ..	75,000 ..
" Angostura ..	10,000 ..
Tolu ..	40,000 ..
Peru ..	7,000 ..

BORAX.—There has been no change in our market as yet, but owing to the great reduction in freight from California lower rates are looked for ere long.

CAMPHOR.—The price of refined remains steady at 23c. (1s.) for ordinary, and 24c. (1s. $0\frac{1}{2}d.$) for 4-oz. blocks. No immediate improvement is expected to take place, as stocks of crude are said to be ample.

COCA LEAVES.—All sorts of prices prevail, and as buyers appear chary of laying in any stock, it is thought that the largest cocaine factory here is still "bearing" the market. Quotations are merely nominal and range from 30c. (1s. $4d.$) for brown leaves to 60c. (2s. $8d.$) for dark green. Prime Huanuco leaves can, however, be had for 40c. (1s. $9d.$) if it came to actual business.

ESSENTIAL OILS.—*Wintergreen* still continues to be quoted \$1.90 in tins (8s. $3d.$), slackness of demand is said to be the cause. *Sassafras* is in large supply and has fallen to 38c. as received from the country, or 40c. (1s. $9\frac{1}{2}d.$) in export packages. *Cassia* sells at 70c. (3s. $2d.$). *Aniseed* at \$1.55 (6s. $10d.$). Large arrivals of the two last have taken place.

QUININE.—The consumptive demand, although on the increase, has not as yet assumed such proportions as to cause outside holders any anxiety, and as manufacturers make no change the position remains *in statu quo*. Prime German brands can be had at 65c. (2s. $10d.$), while domestic makers quote 73c. (3s. $2d.$), both in bulk. The New York factory is said to accept large orders on the 65c. basis.

OIL PEPPERMINT.—A movement is now on foot to depress the market so as to frighten the few farmers who have oil into parting with their supplies; when that is done much higher rates may be expected. Even at the nominal decline that has taken place here, London is lower than the quotation for H. G. Hotchkiss, which to-day is \$4.50 (20s.). Tin oil has not altered, as it is in small supply here, and well concentrated, price from \$4 to \$4.25 (16s. $9d.$ to 17s. $9d.$ net), according to quality.

SPERMACETI shows signs of weakness. The manufacturers still quote 45c. (1s. $11d.$), but they have been asking for offers.

BEE WAX.—Arrivals are coming to hand from California and are worth attention at 27c. for pale clean wax (6l. $12s. 6d.$). Dark wax is cheaper in the market at 25c. (6l. $2s. 6d.$).

SARSAPARILLA.—*Mexican* is neglected at the moment and rules low, prime Vera Cruz 10c. (5s.). *Honduras* is also in little demand, but prices remain firm.

BROMIDE POTASSIUM has not met with any inquiry of late. The maker's price is 36c. (1s. $6\frac{1}{2}d.$, 5 per cent.), but for quantity a considerably lower price would probably be accepted.

TONCA BEANS are not in much demand, but are held steadily at \$1.75 (7s. $6d.$) for prime frosted Angosturas. Several shipments of Paras have lately been made to Europe; these rule very low here.



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish.

Write on one side of the paper only; write early; and devote a separate sheet of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

North British Branch.

SIR,—I am tempted to take my pen again to notice the leading article in this week's issue of the official organ of the Society, in which it again returns to the charge against the North British Branch. Not that there is anything novel in the article, which is simply a re-statement of what has already been stated again and again, with the exception of one very significant note of apprehension that mischief may happen to the Society in connection with this dispute. The occasion of the article was the meeting of Scottish members which was held last Wednesday, *not* in the Society's rooms, but in St. Andrew's Square. Apparently this circumstance has startled Bloomsbury; but, as Mr. Baildon explained, it happened very simply.

It was thought necessary to call a general meeting of Scottish members to consult if anything further could be done in the way of maintaining the Branch; and on applying to the Secretary here, he, before complying, dutifully asked instructions from London, and got word that the application had better be laid before the Council; and, as it did not meet before the date arranged for our meeting, Mr. Baildon had to arrange to hold it in another place. But even had it been otherwise, one would think there was nothing to startle the Bloomsbury authorities. It is exactly what they have been aiming at. Was not the North British Branch the obstruction in the way of the Society getting into touch with Scottish members? and has not the effacement of it been their object since that day when first the President and Vice-President propounded their idea that it must cease to exist, and that any association must be outside the Society, down to the other day, when the culminating stroke was given by the appointment of the new secretary? And now, to make assurance doubly sure, they have got a secretary who may evidently be relied on to discharge his duties strictly in the spirit of his appointment. And yet it is only now, when their success is complete, that they begin to talk of possible detriment and mischief. Even so recently as the date of the wonderful remarks occurring in the editorial review of last year the idea was scouted. Sir, it is idle to indulge in taunts, but it is necessary to state that it was this not only possible but certain detriment that has been constantly urged as the argument against meddling with the North British Branch.

We have always insisted that it possessed the sympathy and confidence of the overwhelming majority of the members in Scotland, and that they would not submit to its being tampered with; and that practically it was fitted to do good work, however anomalous its position might be. Against this there was the unsupported testimony of one of the Scottish members of Council, that it was simply the representative of an interested Edinburgh clique; that any irritation caused by the Council's action would soon subside, and then the Society would be in touch with all Scotland, and all would be harmonious. I brush aside the objection to the Branch founded on its name and titles as really unworthy of serious notice. Well, a change seems to be coming over the spirit of the dream, and we may safely leave the development of events to shed additional light on the subject.

Meanwhile, is there not a strong family resemblance between the conduct of the Council in this and in the Curriculum business? They spent years and years in elaborating their proposal, absolutely disregarding all warning as to its inherent illegality, and rushed to the Privy Council with it, only to be told that "it was opposed to the statute."

I commend this view of matters to the consideration of the members of the Society. The election of Council is at hand. Might we not be represented more creditably?

I am, &c.,
SCOTUS.

The Patent-medicine Stamp Act.

"DON'T"—*Punch*.

To the Chemist and Druggist—

SIR,—Referring to your generous offer to supply memorials for signature praying for certain concessions in reduction of the stamp duties upon patent and proprietary medicines, permit me to ask most significantly—Are chemists so elated by the successful competition of stores and "cutting houses" (which owe their success to the publicity gained in the first instance by the chemists and druggists, and in the second by the publication of what they please to term "exorbitant profits" heretofore demanded), as to warrant them in interfering further in a branch of business which they must have discovered long ago did not yield them but a very insignificant modicum towards the cost of conducting their several businesses?—and have they considered that by doing what is now proposed they would materially enlarge the differences betwixt themselves and the public, and advocate and increase the surreptitious traffic which they have so long and so vehemently protested against?

That the aggrieved chemists and druggists should endeavour to obtain a repeal, or even a reduction, of these stamp duties appears to me to be most illogical and suicidal; that whilst little or no benefit can accrue to themselves, thousands of pounds a year would thus be saved to those proprietors whose nostrums have gained the ascendancy in "cutting houses," the transfer of which has damaged the businesses and reputation of the legitimate traders in them. They might try in vain to obtain such concessions for themselves, and, although in secret admiration even to enthusiasm, may be now watching, and *sub rosa* advocating these painstaking endeavours to reduce their expenditure, enhance their sales, and save the pockets of the public, they will doubtless afterwards "smack their fingers in our faces" and tell us "what fools we have been for our pains."

My advice is, let us profit by the experience of the past, and, as it is of little use attempting to recover the lost trade in proprietaries, let us not even recognise, much less endeavour to render such preparations less costly, and thus augment their sales to our own prejudice and chagrin. For the sake of a few coppers we are still flooding the markets with new preparations, whether of American or other origin, which, if studiously rejected by us, would never obtain currency; but, blind as we are, and thankless as are our endeavours, we obtain the desired publicity; demand is ensured, the cutters take them up, and we have done with them. Let the chemists and druggists of the United Kingdom throw up this profitless trade, rigidly and exclusively; let them destroy all dummies, showcards, handbills, and advertising mediums of every description, accept no so-called "agencies," but run in strenuous and deadly opposition their own specialties at a lesser price, paying the modest 1½d. duty if requisite. They will thus very soon turn the channel of the tide—will ensure profits they do not now obtain, and the proprietors of the nostrums in the hands of the cutters will sooner or later cry "Peccavi," and their enormous profits "melt like butter in the sun." It is true the public would be largely inconvenienced by such a decision, but do either the proprietors of saleable nostrums or the public, in respect thereof, deserve the slightest consideration? I say emphatically, none whatever!

In conclusion, permit me to express my satisfaction, and to thank you most heartily for the boon you have conferred upon us by the weekly issue of your interesting trade journal. There is no doubt it will be the means of bringing the trade into closer relationship, and by an interchange of views, and

a consensus of opinion, bring about the much-needed reforms—sympathy of action, and unity of purpose.

I am, sir, &c.,
56 Everton Road, Liverpool. JAMES PHILLIPS.

SIR,—When this question was first mooted I thought it a good idea to have $\frac{1}{2}$ d. stamps, but a little consideration has convinced me that if it is carried into effect it will be another nail in the coffin of the chemist and druggist. If the trade agitate for it it will be like signing their own death-warrant. The effect will be the cutting grocers (and chemists, alas!) will monopolise the patent-medicine trade, the country will be flooded with cheap specialties, and the profits will certainly not go into the chemist's pocket. Let us rather agitate for the increase of the licence to 2*l.*, and keep the stamps as at present value, but gummed and perforated. It is the reduction of the licence that has been a strong factor in inducing so many grocers to sell patents, and if the stamp value is reduced we shall have, as Mr. Higgs pointed out in your last impression, 2 $\frac{1}{2}$ d. medicines retailed by hundreds of small grocers. The chemist can better afford to sell his own preparation bearing a 1 $\frac{1}{2}$ d. stamp for 6*d.* than make a 1*d.* more profit out of the same article by the reduction of the duty and have the grocer competing with him with a similar article for perhaps 3 $\frac{1}{2}$ d. or 4*d.* If Mr. H. Robinson (who advocates the $\frac{1}{2}$ d. stamp) had two or three huckster's shops competing with him on these lines at Baildon, he would, I think, be willing to sign any number of memorials for a return to the present values.

I am, sir, yours truly,
Guildford, March 16. F. WHEELER.

SIR,—I am one who thinks it is high time for readjusting the price of patent-medicine stamps, and am willing to do all I can in the matter, either by getting signatures to a memorial or subscribing to any fund that is wanted for that purpose—in fact, my opinion is that the duty on medicines ought to be abolished altogether. I think that I have great reasons to complain, being a large user of stamps in a patent medicine that has a large sale here in Yorkshire, that is, children's powders. I make both a shilling and a sixpenny size, and it is both unjust and unfair to have to put a 1 $\frac{1}{2}$ d. stamp on the sixpenny packet, same as the shilling packet; we send out over 15,000 single powders a week, and they mostly go out in sixpenny packets. The stamp duty each week costs me over 10%. As for their being gummed, I would prefer them as they are. We simply cut them, and find we can paste them on quicker than if gummed. It is high time for us to co-operate and raise our voices in the matter against the unfair manner in which we are treated by the Inland Revenue Officers. Trusting that some prompt action may at once be taken in the matter, which shall have my best support,

I am, dear sir, yours truly,
Lindley, March 17. W. H. DEAN.

To the Chemist and Druggist—

SIR,—In the past the reduction of the patent medicine licence has been the worst possible move for chemists, because every little grocer, oilman, &c., goes in for the 5*s.* licence, who never would have touched patents had the price of licence been made 2*l.* 2*s.* all round. In the future the reduction in price of stamps will prove another bad move, because 2 $\frac{1}{2}$ d. stamped mixtures, powders, pills, poisons, &c. (with plenty of puff printing) will be pushed in every direction by people outside the trade, to the great disadvantage of chemists.

Yours faithfully,
Walthamstow. HARDER TIMES. (38/123.)

Thompson's Liver Pills Again.

To the Chemist and Druggist—

SIR,—There is on record somewhere a fable anent an abnormally sagacious dog who met with an unexpected adventure when crossing a plank. What this shadowy allu-

sion may have to do with liver pills you may see from what follows. "Thompson" had for years been selling (1) liver pills recommended by a handbill, and bearing stamps for 1 $\frac{1}{2}$ d., 3*d.*, and so on, according to the price taken, and (2) smaller boxes of liver pills "prepared by Thompson," but of course unstamped. So soon as the present *dictum* (that an exposed advertisement of Thompson's Liver Pills would render liable to duty *any* pills sold by Thompson as liver pills) emerged, Thompson at once withdrew all "public notices" relating to "Thompson's" Liver Pills, reduced all his labels to the commonplace level of "Liver Pills prepared by Thompson," and dispensed with the stamps altogether. We have not heard that he has in any way modified his prices, but suppose his customers can still get the pills at 1*s.* 1 $\frac{1}{2}$ d., 2*s.* 9*d.*, &c., just as hitherto. There may remain a question as to who is benefited by this altered system of pill-selling, but it did not occur to us to ask Thompson when he told us the story. He did not grumble at the net result, in his case, of the plan he had chosen to adopt.

Yours faithfully,
F. NEWBERRY & SONS.

Paraffinum Molle.

To the Chemist and Druggist—

SIR,—Mr. George Coull, in your issue of March 13, does good work in directing attention to this much-used, but not altogether popular, body. His results are interesting and tend to show that the unpopularity to which I refer is probably not due to qualities inherent in paraffinum molle but rather to the "qualities" of certain vendors, who, for greater gain, &c., offer an article which is not a gelatinous hydrocarbon at all, but a mixture of certain fluid and solid paraffins, with perhaps now and then a proportion of the intermediate "jelly."

My experience in working with this new body is not so great as many, yet it has had my best attention, and the mental notes I have from time to time made are here appended, in the hope that they may at least prompt some other practical pharmacist to add his to the sum of our experiences.

Wide as is the range of characters and tests given in the B. P., they would not include very many samples I have seen offered for sale. One was so hard when "set" in its containing vessel that a man might have stood with safety on its smooth surface; another was hard when set, but when broken into ultimately became so thin and gruel like that it could be readily poured from the tin; both of these were labelled "B. P.," and the vendor of the latter insisted that these peculiarities were characteristic of the B. P. article, and that, if the oil was poured off and the remainder again melted, it would come all right. Both of these samples were evidently mixtures of hard paraffin and oil, and the latter had all the character of a mixture of 10 per cent. of hard paraffin or cerasin with a heavy odourless petroleum oil such as can be purchased at about 1*s.* 6*d.* per gallon, and which mixture I have found to make a capital pomade when nicely perfumed, and much better and less costly than the mixtures of animal and vegetable fats usually sold. The cost of the base is only a little over 2*d.* per lb., and it takes the most delicate perfume readily.

These mixtures, however, I think wholly unsuitable for pharmaceutical purposes, and are certainly unpleasant to use in the form of ointments. Besides these I have met with jellies of various degrees of stiffness, and must give the palm to some of the stiffer samples for ointment making, even over a mixture of such as vaseline and hard paraffin.

This addition of hard paraffin to ointment bases I think a mistake, as it is almost impossible to prevent the formation of a hard and knotty ointment. With a jelly melting about 118° Fahr., on the other hand, a smooth and homogeneous ointment is readily obtained; but for toilet purposes it is found to be sticky and is not liked, and this brings me to the ready tests which I now apply to all samples of paraffinum molle offered.

In the first place it must be almost free of taste. If free of taste it can have no smell, and it must have a good colour; then I roughly test its melting-point by working a little in the palm of one hand with the forefinger of the other. If it liquefies it must melt under 100°, and for ordinary use I see

that at least it becomes quite soft in the hand. Soft paraffins melting under 110° Fahr. will do this, and these are pleasant to use for hands, lips, &c.

Then I note that there is no hardness nor trace of knot when the finger is pulled through the mass after being melted and set. I am thus assured of the absence of any large quantity of hard paraffin, and by inference also of oil, and have some confidence that what I am paying 6d. or 8d. for is worth more than $2\frac{1}{2}$ d.

If a piece be put in the mouth, and kept there for some time, a good idea of its melting-point and taste will thus be obtained; but I prefer the hand, as, by so testing it, I am doing exactly what most consumers will do, and thus I think the test more reliable. H.

[There is sound advice in this letter, and we trust that the attention which has been called to the subject will have some good result. The objection against hard paraffin in ointment bases opens up a very serious question; it is a fact that the new official basis for ointments, viz. hard and soft paraffin, is a total failure, as it is impossible to get smooth ointments.—Ed. C. & D.]

119/39. *Petrolin.*—**Paraffinum Molle** from Cerasin.—The paraffin ointment of the German Pharmacopœia is made from 1 part of hard paraffin (cerasin is such a paraffin), and 4 parts of a liquid paraffin of specific gravity 0.840, non-fluorescent and distilling above 360° C. It is said of such mixtures that they are gritty, whereas *paraffinum molle* should be homogeneous and non-crystalline. The German ointment is crystalline. If you can get the heavy, non-fluorescent paraffin oil, you should experiment with it, and take particular care that all vessels in which the mixture is stirred are hot to begin with. Stirring should be constant.

238 26. *Walker & Son (Maidenhead)* write us regarding a sample of **Ung. Hydrarg. Nitrat. Dil.** It is of a dark-brown colour. They say that, "prepared with lard instead of *paraffinum molle*, the colour is good, so is the colour of the strong ointment from which it is made. Why is the discoloration?"

[Examination of the *paraffinum molle* will show that it does not answer official requirements. With lard the nitrate of mercury is soon reduced, but with soft paraffin answering B.P. tests, the diluted ointment keeps well for a long time. See paper by Mr. Coull in our last, and a letter on the same subject in the present issue.]

To Chemists' Assistants.

To the Chemist and Druggist—

SIR,—During the last few years I have been making a tour through various parts of the world, in the interest of a well-known London firm of manufacturing chemists, and have during that time been noting down facts relative to a good outlet for chemists' assistants in England; for, before I went abroad, I travelled through England in a similar capacity, and was sometimes grieved at the low and even ridiculous salaries given to well-educated men, who in reality are made slaves of in England for a stipend barely sufficient to keep them respectably dressed.

Some of the countries I have visited are India, China, Japan, Philippines, Straits, Java, and Australasia, and it is to the last mentioned I would advise all sensible qualified young men to go. They should take with them a few letters of introduction, letters of reference, &c., and I feel certain no difficulty will be found in getting situations. The question I had put to me, times innumerable, during my twelve months' tour through the colonies, was: "Do you know of a good fellow?" and I may tell you the proportion of "good fellows" is very limited; somehow a lot of waifs and strays have got out there.

It is very essential a man should be qualified. The Minor is quite as useful as the Major.

As regards salary, the usual thing to commence with is 100*l.* per annum indoors; if out doors, 2*l.* a week is generally allowed for board and lodging.

In addition to this, there are many more opportunities offered for a man without capital of getting into business for himself; for in such a growing community there is

scarcely any necessity to purchase goodwill, and the wholesale houses are always willing to advance money to pharmacists desirous of going into business, with the same object in view that a brewer has in England in putting a tenant into an hotel. I do not think there is any reason to object to this system, for friends of mine who have commenced in this way have spoken very satisfactorily of it. No doubt it would be better if a man had capital of his own, for he would save interest.

In conclusion I would advise anyone going to the colonies *not* to take a situation before they arrive, as they need have no mis-giving about obtaining one, and they will be better able to judge for themselves.

Melbourne and Sydney are the centres I would recommend—New Zealand and Tasmania are not so good—very limited.

Yours faithfully,

Snow Hill Buildings, London, E.C. W. SHEPPERSON.

[This is good news; but we think it right to point out that the absorptive capacities of the Australasian Colonies are, after all, limited. Our correspondence (which has come from the most authoritative sources) has been to the same effect as Mr. Shepperson's advice; but it has always been made clear that the good situations were waiting for reliable, steady, competent men. Mr. Shepperson says the same thing; but he hardly makes that condition prominent enough. Every one thinks himself "a good fellow," and some with that opinion may get out to Australia, and find when there that they are after all merely "waifs and strays."—Ed. C. & D.]

Ceyloniana.

Our correspondent "Cinnamon," who sends us some notes on pharmacy in that island, encloses some humorous letters and orders received from native and other customers. These are much of the same character as those familiar to home druggists. Oxyle acid, auxolic acid, steal drops, Epps's salts and senega, locution for sore eyes, salts of sorrow, black watch, (wash), clear sow (creasote), and such like appear to be current pharmaceutical phraseology. There is a funny story told by a dentist of a Singalese boy who came to him to have two front teeth drawn. "They were beautiful teeth, but rather too long; nothing at all the matter with them. I refused to extract them, but after he had been twice I said I would do it if he brought his father or his father's consent." This was the letter which the boy sent him:—"Dear Sir,—Please read this letter and I beg to inform I did asked from the Father The sentence of the teeth. He said if I glad most then he is like to it. I will come on tuesday. I am Sirs Believe me, Yours truly——" Here is a letter from an applicant for a situation:—"Honored sir,—Your poor petitioner thinking himself to be his master and supporter begs to be released from his present distresses by your honor's pitying and obliging upon him with a Post if there is any existing under your auspicious protection and has herein written in the following for your kind inspection Copies of Testimonials which will render to your unstudied grace with every satisfaction. For which your humble petitioner as in duty bound shall ever pray. Begs to remain Honored sir Your most obedient servant, Shah Ally, School master.

Linimentum Ammoniae, P.B., 1886.

To the Chemist and Druggist—

SIR,—Among the cares and troubles of our oft-times irritating calling, hartshorn and oil, the lin. ammoniae of the P.B., occupies a prominent position. There is scarcely a pharmacist in the United Kingdom, I believe, who has not at some time or other had trouble with that useful and popular embrocation.

It usually, after keeping, forms a nasty mass, which either utterly refuses to sally forth from the containing vessel, or, if it does so condescend, comes out all at once in a thick lump, runs over the sides of the vessel poured into, and causes great trouble and annoyance, and, as that usually happens on a busy Saturday night, the distress occasioned is very lamentable. I do not know how others have fared with the new directions in the 1886 Pharmacopœia, but, however much I have shaken, and however nice a cream has been formed at

the time, I find that the result is not altogether satisfactory on keeping for a few weeks.

I do not think it is generally known that the addition of a little spirit of wine nicely bridges over the difficulty. I have been in the habit of adding a small quantity, about 3 per cent. to the pint, with very satisfactory results. The product is a nice cream, which I have never found get either thick or separate on keeping for a long time.

Deeming this of sufficient interest to the trade to find a stray corner in your valuable paper, I am,
Malvern, March 16. CHAS. J. REES.

Corn Solvent.

To the Chemist and Druggist—

SIR,—We have a difficulty with a corn solvent which we prepare. We put it up in 2-dr. and 4-dr. bottles, and before half a bottle is used it turns to a thick jelly. The following is our formula:—

Ac. salicylic	3x. (Troy)
Ext. cannab. ind.	3xij.
Colloid. flex. m.	℥ij.
Ether meth.	3xv.
S. v. m.	3v.
Gum benzoin	3ij.

Mix.

The gum benzoin is dissolved in ether and methylated spirit, strained, and then this is added to the colloidion; the acid salicylic and extract is then dissolved in this. We used to prepare it from the three first ingredients only, and this used to answer very well, it being in consistence no thicker than an ordinary tincture; but about twelve months ago what we prepared was syrupy in consistence, and we added the ether and methylated spirit; but this does not do, as, before the bottles are used it is thick; and as the last expedient we are adding the benzoin. We obtain our colloidion from the same firm as we have always done.

We pierce the corks with a cork-borer about half-way up and fix the camel-hair pencil in with glue. Do you think this has anything to do with the rapid evaporation, or do you think that the addition of the ether would cause it to gelatinise?

A solution of this difficulty will oblige,

PERPLEXED.

[The preparation should have a syrupy consistence, but often, owing to modification of the pyroxylin, it becomes gelatinous. The simplest plan would have been to change the colloidion.]

Unqualified Assistants.

To the Chemist and Druggist—

SIR,—In the *Daily News* of March 15 appeared the following:—

DISPENSING MEDICINES.—“A Chemist and Druggist” writes:—“I think the danger arising from incorrectly dispensed medicines might be considerably decreased by the law making it compulsory that all chemists’ assistants should be qualified before being allowed to dispense medicines. As the law stands at present, an assistant is allowed to dispense medicines without any legal proof of his capabilities to do so. I might safely say that half the chemists’ assistants of the present day are unqualified, and a great proportion of these have not passed the Preliminary examination of the Pharmaceutical Society, or any equivalent, which a youth ought to pass on leaving school. Then, again, another great source of danger, to my mind, is the permitting of a qualified chemist to keep as many branch shops as he chooses, managed by unqualified men. In my opinion, if these two great evils were properly dealt with, it would be to the mutual benefit of the public at large and the chemists and druggists themselves.”

Might I, through your valuable columns, ask “A Chemist and Druggist” if he ever served an apprenticeship himself? If so, did he never dispense a prescription himself? If not, where were his qualifications as an assistant? Or, has he ever kept an apprentice? and if he did, did he never allow him to dispense a prescription? If not, how can he have taught his apprentice his trade? For surely dispensing is the chief part of a chemist’s business. “Chemist and Druggist” considers it should be compulsory that all assistants should be qualified. Quite right, sir. But, unfortunately, all have not a father before them, and have to work many years as assistants before they can save enough to qualify themselves as Minor men. During my experience I have lived in

situations where there have been both qualified and unqualified assistants, and in many cases the unqualified have known their business much better than those who have gone through the Square. One way, sir, I should suggest out of the difficulty would be for it to be compulsory that a chemist, on taking an apprentice, should register his (the apprentice’s) name at the Square, and before that apprentice should be considered out of his time, he should be subject to a simple examination in Dispensing and Pharmacy, and a certificate should be given to the apprentice and the master, to show that the former had thoroughly learnt his business and the latter had thoroughly carried out his duty.

I am, sir, yours very truly,

ONE OF THE GREAT UNQUALIFIED. (124 49)
Southampton, March 16.

235.24. H. C. B.—Essence of Ratafia.—1 part of essential oil of almonds (*sine acid prussic*) in 19 of rectified spirit.

Liquid Cochineal.—The following is from an exhaustive paper on the subject printed in *THE CHEMIST AND DRUGGIST*, May 1884, and is the simplest and best that has yet been given for cochineal colouring:—

Finest silver grain cochineal, 1 oz.; subcarbonate of potash, 1 oz.; potash alum, 1 oz.; citric acid, $\frac{1}{2}$ oz.; sugar, 4 oz.; water, a sufficient quantity. Boil the cochineal (bruised) in a glass or copper vessel of suitable capacity in 8 oz. of water, to which the subcarbonate of potash has been added. Mix loosely the alum and citric acid in powder, and add gradually to the boiling liquid, and continue to boil until effervescence has entirely ceased. While still hot filter on to the sugar, and wash the filter with hot water sufficient to make the whole measure 12 oz.

Foaming Myrrh and Borax.—Add 1 part of tincture of quillaia to 7 parts of tincture of myrrh and borax.

119.37. R. H.—Catarrh Cure.—The cutting sent gives us no information as to the nature of the preparation, but catarrh “cures” are generally mixtures of herbs which are burnt and the smoke inhaled. Such a mixture may be composed of stramonium, lobelia, bayberry, of each 2 oz.; camphor, $\frac{1}{2}$ oz.; nitre and sal ammoniac, of each $\frac{1}{2}$ oz.

122.17. Lime Cream.—*Crinis* asks if 6 oz. of *Liquor Potassæ* added to a gallon of an oleaceous preparation for the hair would be likely to be injurious?

[No; the alkali combines with the fatty acids of the oil and forms a soap.]

122.40. Imp.—To reduce *Liquor Ammoniacæ*, specific gravity .880 to .891, add 2½ oz. of distilled water to each pint; but you had better ascertain that the solution is really .880 before you dilute it. You should use a hydrometer in operations of dilution: it saves time and ensures accuracy.

121.73. *In Vino Veritas*.—*Pulvis Basilicus*.—Calomel, scammony, and cream of tartar, of each 1 drachm; antimonial powder, ginger, and jalap, of each one scruple. Mix.

124.58. J. N. H.—Dispensers on Emigrant Steamers to Australia.—To get a post of this kind apply to a company: your name will be registered, and in the course of ten years your turn will come. See reply 117 24 last week.

123.45. J. L. Savage wishes recipe for Best Dentist’s Plaster. Is it *Stent* or *plaster of Paris* that is meant?

The Blanc Mange Powder sent to us by a correspondent is coloured with aniline hydrochlorate (magenta), and flavoured with vanilla and strawberry. The *Custard Powder* is coloured with turmeric and flavoured with bitter almonds.

124/49. *Dens.*—Foaming Liquid Dentifrice.—We have published the following several times, and do so again for the benefit of our new subscribers.

Quillaja bark in coarse powder	4 oz.
Rectified spirit	3½ ..
Water	5 ..
Oil of wintergreen	30 mins.

Macerate for ten days, and filter. At the same time macerate in a separate vessel—

Cochineal	8 grains
Peppermint water	4 oz.
Glycerine	2 ..

Filter both solutions, mix and make up to 24 oz. with water.

20/122. A Subscriber who has lost his certificate of qualification as a chemist and druggist is advised to address the Registrar, 17 Bloomsbury Square, London, W.C.

Pepsin in Prescriptions.

SIR,—I may answer your "Country Subscriber" (March 6) that, as "pepsin" is ordered, "B.P." is indicated. He is not in a position to assume that "Bullock's" or any special make has been previously supplied, for those imposing such a charge as 5s. 8d. would be no more likely to supply a more expensive drug than the B.P. preparation, nor be more reliable, than those who dispense at one-third the cost. I should suggest 2s. to 2s. 6d. as a sufficiently remunerative charge for a country dispenser to make, as against a charge of 1s. or a trifle over which he would have to contend with in towns.

Any explanation demanded should be from those who have imposed the exorbitant charge, which I should not hesitate to maintain it was. The question of the make of pepsin could be reasonably raised, no special make being ordered. I should rather question the authority of the prescription, as prescribers nowadays do not, as a rule, order such unsightly, and, so far as the patient is concerned, highly disgusting mixtures.

Liverpool, March 16.

J. P.

124/11. *W. L.* asks *re* Estimation of Morphia in Opium (B.P.):—"Can you inform me what is meant by 'counter-balance two small filters; place one within the other in a small funnel, and decant the ethereal layer as nearly as possible upon the inner filter; add 200 grain measures ether to the contents of the bottle and rotate it, again decant," and so on. This is a mystery to me. Can you give me your opinion on the matter?"

[Such questions make us doubt if the matter is as clear as noon-day to us. "Counter-balance two small filters" means that the filters have to be of the same weight. "Place one within the other"—that is, fold them together and put them into the funnel as if they were one. "Decant . . . upon the inner filter"—if you try, you will find that it is no easy matter to decant on the outer filter—in fact, it is all one filter. The meaning of the whole thing is, that the ether is to wash away everything but the morphia. Of course the official phraseology is somewhat mixed—that we cannot remedy.]

125/19. *New Subscriber.*—Thin Hair.—Linimentum Crinale is one of the best applications. It is made of cantharidine 1 grain, acetic ether 2 drachms: dissolve, and add, rectified spirit 3 oz., castor oil 1 oz., oil of lavender 15 minims.

For Freckles—

Zinc sulpho-carbolate	5j.
Glycerine	3ij.
Rectified spirit	3j.
Orange-flower water	5iss.
Rose water to	3viij.

To be applied morning and evening, also immediately after exposure.

125/31. *Xenophon.*—Camphor Ice.—See February issue, page 122.

12/125. *Apprentice.*—An interval of three months is required between passing the Preliminary and appearing for the Minor examinations. A longer interval, and the division of the Minor into two parts was proposed by the Pharmaceutical Council, and certain by-laws were framed to effect this object; but the Privy Council refused to sanction them, and they are not likely to appear again till examinations have ceased to trouble you.

Supplying Poisons through Grocers.

34/122. *W. C. H.* writes:—"A customer (a grocer and general dealer) has from me an assortment of drugs in packets tied up, and in bottles corked, varying in price from 1d. to 1s., all labelled with my name and address, which are sold for me on commission. Is it illegal to include among these articles small quantities of drugs specified under Schedule A, part 2?"

[It is illegal. The question was fought out in 1881 by the Chemists' Trade Association, in the case of *Templeman v. Trafford*. The defendant, a shopkeeper at Oxford, sold a pennyworth of red precipitate which bore the label of a registered chemist, and for the defence it was claimed that Trafford was merely a servant of the chemist. The Oxford magistrate accepted the defendant's argument, but it was reversed by the Court of Queen's Bench. The case would have been different if the chemist had held the shop and if Trafford had been only his manager.]

64/120. *Master and Servant.*—*A. P. S.* asks whether an employer is legally justified in withholding an assistant's salary owing to absence from illness if a doctor's certificate is given him that the patient is unfit for work; also whether an employer is legally justified in detaining an assistant for an hour or two after his recognised hour for leaving as a punishment, say, for omission to send out a parcel or for forgetting to wind up the clock?

[An assistant is entitled to his salary during any temporary illness. If he should be likely to be permanently disabled, or if the temporary illnesses should be frequent, the proper course for the employer to take would be to terminate the engagement by notice in the usual way. The employer has no legal right to keep an assistant in as a punishment, although he might do so (within reasonable limits) on account of pressure of business, &c.]

74/123. *Leeds.*—Sale of Small Quantities of Spirit.—You are, we presume, a new subscriber. If not, refer to THE CHEMISTS' AND DRUGGISTS' DIARY, 1886 (p. 126), for full information concerning the sale of spirits. We quote there a letter received by us in 1880 from the Board of Inland Revenue in answer to our inquiries, stating that, though no sale of spirit by unlicensed persons is authorised by law, the Commissioners, having regard to the difficulties which would be experienced by medical and scientific gentlemen in obtaining alcohol for purposes of medical and scientific research, do not interfere with the sale, by registered chemists and druggists, to such persons of small quantities not exceeding 8 oz. at a time.

6/124. *J. T.*—You cannot be a chemist in Ireland without passing their examinations. Their examination for the title of "pharmaceutical chemist" is intended to be about equivalent to our Minor. Chemists and apothecaries may both dispense. We cannot advise you as to any particular part of Ireland where you would be most welcome or successful. If you want to know more about their examinations, obtain the Calendar from the Registrar of the Pharmaceutical Society, Dublin.

59/124. *J. H. A. (Ware).*—The announcement you refer to was published in the *Times* of February 23. The Indian Government offers a reward of 5,000 rupees to the inventor or discoverer of a process which will render salt unfit for human consumption, whilst still leaving it fit for use for cattle, as manure, or for industrial purposes. A collection of papers on the subject can be obtained on application at the Revenue Department of the India Office, St. James's Park, S.W.

GELATINE COATED OVAL PILLS.

The only Gelatine Coated Oval Pills of ENGLISH MANUFACTURE in the Market. Special List of REDUCED PRICES on application.

POWDERED DRUGS. All ground in our own Mills, and of Guaranteed Purity.

EXTRACTS (ENGLISH).

CONCENTRATED INFUSIONS AND DECOCTIONS. GRANULAR EFFERVESCENT PREPARATIONS.

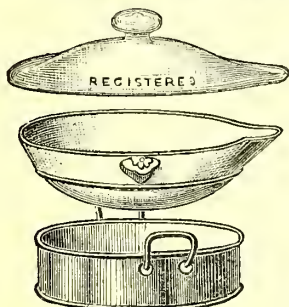
GELATINE COATED HORSE BALLS (PATENTED).

Forwarded on application (PRICES CURRENT, LIST OF SPECIALITIES, PILL LIST (GELATINE OR PEARL COATED).

WYLEYS & CO., COVENTRY.

LONDON ADDRESS—1a BURY STREET, ST. MARY AXE, E.C.

“MAY-ROBERTS” WATER BATH, REGISTERED.



This Water Bath will supply a long felt want amongst Chemists and Perfumers, where small quantities of materials have to be dealt with.

The old form of Water Bath necessitates the use of a second vessel for pouring the melted Pomade, Cream, or other substance in to the bottles or jars in which they are sold. In the “MAY-ROBERTS” Water Bath the earthenware bowl can be lifted out of the tin containing the boiling water, the process of cooling being thereby very much expedited, and the contents can be poured into the bottles or jars direct from the bowl. The Bath is also supplied with an earthenware cover.

1 PINT.	5 PINT.	10 PINT.
Each 3 0	5 6	9 6

MAY, ROBERTS & CO.,

9 CLERKENWELL ROAD, LONDON, E.C.

Temporary Address during Rebuilding of Premises—9 MOOR LANE, E.C.

Telegraphic Address—“MOAB LONDON.”

SOLE IMPORTERS

OF

APOLLINARIS WATER,

FRIEDRICHSHALL WATER,

HUNYADI JANOS WATER,

THE APOLLINARIS COMPANY, LIM.,

19 REGENT STREET, LONDON, S.W.

SPECIAL PRICES ON APPLICATION.

GOLD MEDALS—DUBLIN, 1882; BOSTON, 1883;
LONDON (INTERNATIONAL EXHIBITION), 1884.

SIR JAMES MURRAY'S PURE FLUID MAGNESIA.

The ORIGINAL Article, as prepared by the Inventor, Sir James Murray, M.D.

For over 60 years in use as an excellent remedy in cases of
ACIDITY, INDIGESTION, HEARTBURN, GRAVEL, AND GOUT.

Sold by all respectable Chemists, in **LARGE-SIZED** Bottles (the 1s. size containing nearly
Double the quantity usually sold at that price), at **1/, 2/6, and 3/6** each.

CAUTION.—Observe that the Signature of the Inventor is on every label.

SIR JAMES MURRAY'S FLUID CAMPHOR

Is a valuable remedy in cases of **SLEEPLESSNESS and WEAK NERVES.** Bottles, **1/ and 2/** each.

SIR JAMES MURRAY & SON, Chemical Works, Temple Street, Dublin.
BARCLAY & SONS, 95 Farringdon Street, London.

BAISS BROTHERS & CO., WHOLESALE AND EXPORT DRUGGISTS,

AND

Manufacturing Chemists and Druggists' Sundriesmen.

[ESTABLISHED 1833.]

JEWRY STREET, LONDON, E.C.

[ESTABLISHED 1833.]

**QUALITY GUARANTEED BY
AFFIXING OUR TRADE MARK
TO EVERY PACKAGE.**

TRADE MARK



**QUALITY GUARANTEED BY
AFFIXING OUR TRADE MARK
TO EVERY PACKAGE.**

FOR EXPORT ONLY.

An exhaustive illustrated Export Prices Current, comprising every requirement of the Chemist and Druggist, will be published on the 1st of January, April, July, and October, and can be had by application (post free) on receipt of trade card. The attention of the trade is especially called to their preparations, including Extracts, Concentrated Decoctions, and Infusions, for which their name is so well established, and are guaranteed to be prepared with the utmost care from the finest drugs, and which will keep in hot climates for any reasonable length of time.

Manufacturers of Fruit Essences, which form a ready means when mixed with Acidulated Simple Syrup, of producing an article that has all the flavour of the freshly pressed fruit, and can thus be used with aerated water as a most refreshing drink in all hot climates.

CORRESPONDENCE IN ALL LANGUAGES.

Æthers, Alcohols, Liniments, and Tinctures shipped in bond at lowest market prices.

Patent Medicines and Proprietary Articles at special net prices. Scientific and Philosophical Instruments. Surgical Instruments.

Orders sent through Merchants should specially bear the name of BAISS BROTHERS & Co., and will be put on very best terms.

Silver Medal at Inventions Exhibition 1885.

Established
1798



Howards & Sons

FLUID EXTRACT OF CINCHONA,

made from C. Califaya, or C. Succirubra, containing the whole alkaloidal contents of the bark.

QUININE, CINCHONA ALKALOIDS,

Acids, pure.

Æthers, pure & methylated.

Antimony preparations.

Benzoic Acid & Benzoates.

Bicarbonate of Soda (Howards').

Bismuth preparations.

Borax & Boracic Acid.

Bromides of the Alkalies.

Camphor Bells, Blocks, & Flowers.

Cocaine Hydrochlorate.

Citrate of Iron & Quinine, P.B.

Citric Acid & Citrates.

Corrosive Sublimate.

Iodides of the Alkalies.

Iodoform.

Magnesia.

Mercurials, Calomel, &c., &c.

Morphia Salts.

Rochelle Salt & Pulv. Seidlitz.

Spirit preparations.

AND OTHER PHARMACEUTICAL CHEMICALS.

Stratford, Essex.



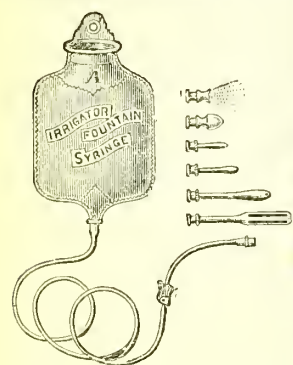
Detailed Price Lists on application.

THE DRUGGISTS' POPULAR VEGETABLE LIVER PILLS SUGAR COATED

And the LITTLE LIVER GRANULES, Sugar Coated,

Manufactured by **WILEY & HARRIS, Philadelphia, U.S.A.**
Perfectly Soluble, Reliable, and Effective. **THE CHEAPEST.**

WHOLESALE of **MACKEY, MACKEY & CO., R. HOVENDEN & SONS, and DEALERS GENERALLY.**
E. A. DE PASS & CO., 3 Coleman Street, London, E.C., Sole Agents.



MATTSON'S NEW IRRIGATOR
FOUNTAIN SYRINGE.

Highly recommended by prominent physicians.

SYRINGES AND INJECTION APPARATUS

Of novel and approved designs for every purpose at prices which defy competition.
Only pure Para Rubber used. No Shoddy or Pipe Clay.

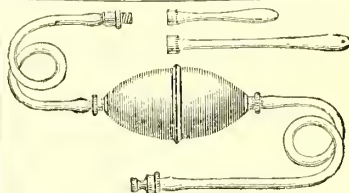
THE
MATTSON RUBBER CO.
OF
NEW YORK.

E. A. DE PASS & CO., 3 Coleman Street,
SOLE AGENTS FOR GREAT BRITAIN.

EXCLUSIVE AWARD at the CENTENNIAL EXHIBITION
at PHILADELPHIA, 1876.

See the "Chemist and Druggist" Issue
of March 6, 1886.

THE "LITTLE DOT" ATOMISER
IS A MARVEL OF CHEAPNESS.



SEASIDE SYRINGE.

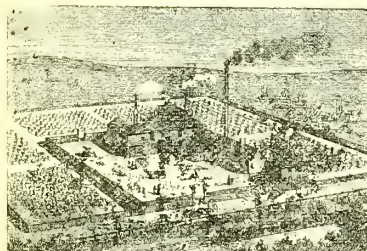
With Metal or with Vulcanite Tubes.

The cheapest Higginson principle
Syringe in the world.

THE
"GRENOBLE" SYRINGES
ARE THE MOST
COMPLETE FAMILY ENEMAS.
NO METAL PARTS.

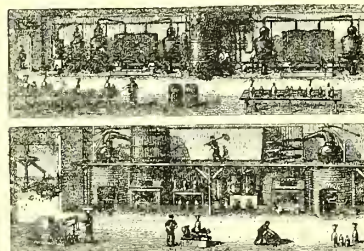
Sold by all the principal Wholesale Sundriesmen.

Catalogues and Price Lists free on application.



MITCHAM PEPPERMINT, LAVENDER OILS, &c.

STEAM DISTILLERIES:
MITCHAM ROAD,
Near WEST CROYDON, SURREY.



REGISTERED

GOLD MEDAL,

SILVER-GILT MEDAL,

SILVER MEDAL,

REGISTERED



TRADE MARK.



PARIS, 1885.



MELUN, 1880.



ANTWERP, 1885.



TRADE MARK.

JOHN JAKSON & CO., 17 Philpot Lane, LONDON, E.C.

Each Bottle must bear the above Trade Mark, under which we send from our Mitcham Distilleries only PURE Peppermint, Lavender and Camomile Oils. Each Bottle is labelled specifying that our Oils are Guaranteed PURE, and as such are INVOICED.

DR. REDWOOD'S ANALYTICAL DEPARTMENT, 17 Bloomsbury Square, London, W.C.

Having visited the cultivation grounds and Distilleries of Messrs. JOHN JAKSON & CO., at MITCHAM, devoted to the production of Lavender, Peppermint and other essential Oils, and having submitted samples of the Lavender and Peppermint Oils prepared by this firm to a careful physical and chemical examination, I can bear testimony to the very complete arrangements, with all modern appliances, which are here provided for distilling essential Oils, and to the excellent quality of the Oils so distilled.

MITCHAM has been renowned throughout this, and part of the previous, century for the successful cultivation of Peppermint, Lavender, and other medicinal plants, from which oils of superior quality have always been produced; but, at no previous period have the means for obtaining products of the highest quality been so successfully carried out as they have been since the introduction of Messrs. JOHN JAKSON & CO.'S system.

January 9th, 1886.

T. REDWOOD, Ph.D., F.I.C., F.C.S., &c.

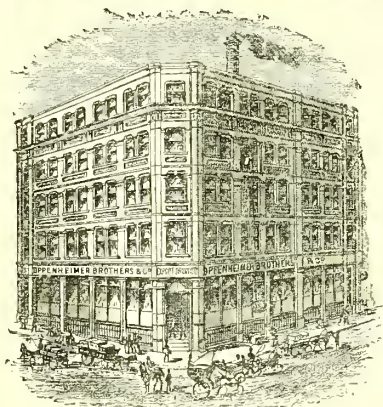
Emeritus Professor of Chemistry and Pharmacy to the Pharmaceutical Society of Great Britain.

Our Essences are put up in Bottles of $\frac{1}{4}$, $\frac{1}{2}$, 1, 2 and 5 lbs.

PRICES.

N.B. The following quotations are only for small quantities. From 6 lbs. and upwards special arrangements can be made at reduced prices.
MITCHAM PEPPERMINT OIL, Non-Rectified 40/- per lb. | MITCHAM PEPPERMINT OIL, Double Rectified 47/- per lb.
MITCHAM PEPPERMINT OIL, Rectified 44/- .. | MITCHAM WHITE PEPPERMINT OIL, Double Rectified Extra .. 53/- ..
MITCHAM LAVENDER and CAMOMILE OILS, Extra Fine (in same quantities as Peppermint), at Market Price.

OPPENHEIMER BROS. & CO.



Alkaloids; Essential Oils;
Scale and Granular Preparations;
Tinctures and other Alcoholic
Preparations in Bond.

Patent Medicines;
Druggists' Sundries;
Surgical Instruments and Appliances,
&c., &c.

WHOLESALE DRUGGISTS AND MANUFACTURING CHEMISTS.

MANUFACTURERS OF
PHARMACEUTICAL, CHEMICAL, & PHOTOGRAPHIC PREPARATIONS.

PRICES CURRENT FORWARDED ON APPLICATION.

Special Quotations for Large Quantities or Original Packages.

Special attention paid to the Light and Solid Packing of Goods for Shipment Abroad.

SOLE PROPRIETORS and Manufacturers of

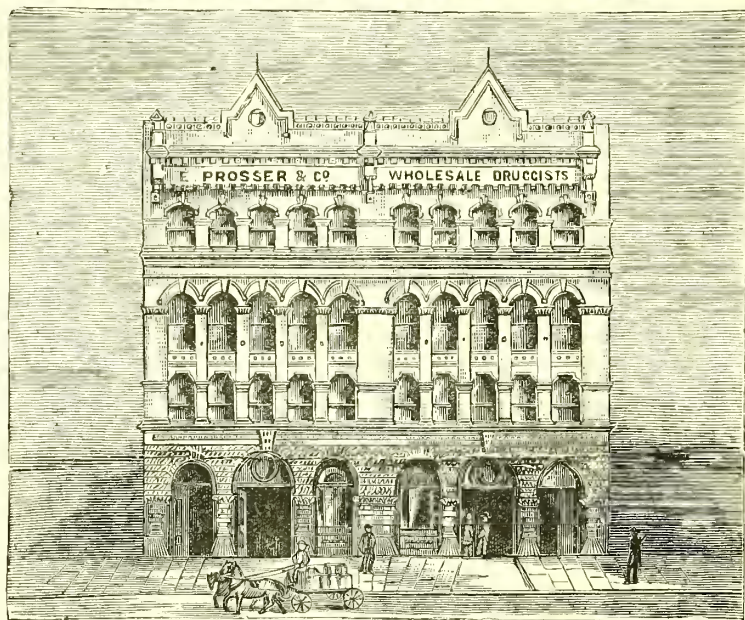
LIQ. EUONYMIN ET PEPSIN CO.

(OPPENHEIMER'S).

OPPENHEIMER BROS. & CO., 1 & 3 SUN STREET, LONDON, E.C.

E. PROSSER & CO.,

IMPORTERS OF PATENT MEDICINES, DRUGGISTS'
SUNDRIES, DYE GOODS,
SURGICAL INSTRUMENTS, PERFUMERY,
FANCY SOAPS, SPONGES.



IMPORTERS OF BRUSHWARE, CORDIAL MAKERS,
MACHINERY, CORKS, BOTTLES, LABELS,
PHOTOGRAPHIC CHEMICALS AND MATERIALS.

Wholesale Druggists, 19 & 21 O'Connell Street, SYDNEY.

Agencies for Patent Medicines and other Goods solicited. Travellers cover New South Wales and Queensland.

London Agents: LAUGHLAND, MACKAY & BAKER, 85 Gracechurch Street, E.C.

ROCKE, TOMPSITT & CO.,
WHOLESALE DRUGGISTS,
MELBOURNE,
AND
119 & 120 LONDON WALL, E.C.

Samples and Quotations solicited.

Agencies undertaken on the most advantageous terms.

Wholesale Depot for Sander & Son's Pure Volatile Eucalyptus Oil (Eucalyptol), and Importers of Oil of Eucalyptus.

Wholesale Agents—Messrs. Hodgkinson, Prestons & King, 81 Bishopsgate Street Without, E.C.

FELTON, GRIMWADE & CO.,
Wholesale Druggists and Manufacturing Chemists,
MELBOURNE, VICTORIA.

LONDON AGENTS:—

Messrs. GRIMWADE, RIDLEY & CO., Mildmay Chambers, 82 Bishopsgate Street.

Wholesale Agents for Bosisto's Genuine Oil of Eucalyptus.

KEMP THORNE, PROSSER & CO.,

NEW ZEALAND DRUG COMPANY, LIMITED,

Wholesale Druggists,

MANUFACTURING CHEMISTS, AND COMMISSION MERCHANTS,

Head Office and Factory, DUNEDIN.

BRANCH HOUSES:

High Street, CHRISTCHURCH,
Hunter Street, WELLINGTON,
Shortland Street, AUCKLAND,
Patent and Proprietary Medicines Agency.



NEW ZEALAND.

London Agents—

Messrs. GRIMWADE, RIDLEY & Co., 82 Bishopsgate Street.

MENTHOL Our Extra Steam Refined quality, is in firm, hard, dry and snowy white crystals, entirely free from oily contamination (and therefore of the highest melting point.) As the original and largest manufacturers in the world of the true Japan Menthol, we guarantee our brand to be absolutely pure. Beware of substitutes. For full particulars, therapeutic uses, etc. see special circulars to be had on application.

PEPPERMINT of a tarry and resinous nature which are objected to by some consumers are extracted. It is of water white colour, retaining its full aroma, pungency and strength and guaranteed absolutely pure and soluble in spirits of wine.

Our Extra Steam Refined Oil is treble distilled and twice rectified by steam, by an entirely new process and in apparatus of our own invention, by which all those polymeric products

Yokohama,
Japan.

COCKING & Co. Established 1863.

Commission Merchants, Wholesale Druggists and Manufacturing Chemists.

OTHER SPECIALITIES.

Cod Liver, Fish and Orange Oils, Vegetable Wax and Isinglass.

Monthly Market Report and detail circulars on application.

LONDON AGENTS:—SPIES BROS & Co., 106, Fenchurch Street.

Telegram Address—"COCKING YOKOHAMA."

This is the genuine essential oil as produced in the

CAMPBOR

manufacture of the Solid Camphor of Commerce. Our brand is guaranteed to be the natural oil and not the fictitious mixture of refuse Camphor and Turpentine generally sold. Having made a special study of its manufacture we have succeeded in producing a colourless oil and entirely free from any smell. It is a remedy in Rheumatism, a good solvent of resins, and the most perfect article for the use of the essential oil distiller.

ANTHONY DAVISON,
WHOLESALE DRUGGIST,
KIMBERLEY,
DIAMOND FIELDS, SOUTH AFRICA.

F. REED & CO.,
WHOLESALE & RETAIL
DRUGGISTS,
Dispensing and Homœopathic Chemists,
DURBAN AND POINT,
PORT NATAL, SOUTH AFRICA.

B. KEITH & CO.,

MANUFACTURERS OF

**PURE CONCENTRATED
MEDICINES,****CONCENTRATED TINCTURES, ETC.**

We make a full line of RESINOIDS, such as PODOPHYLLIN, LEPTANDRIN, EUONYMIN, IRISIN, HYDRASTIN, &c., ALL PURE.

So-called Concentrations are in the market, called by the same name as manufactures, that are made by triturating extracts etc., with sugar of milk, powdered root, etc.

WHAT ARE CONCENTRATED TINCTURES?

They are not made from the crude material, but by dissolving the active principles in Alcohol in definite proportions, and invariably represent a uniform amount of therapeutic power.

Send for printed matter on CON. TINCT. AVENA SATIVA in the Morphia or Opium Habit, and certificates from different members of the Medical Profession, citing cases under their charge, treated by it; also REVISED AND ENLARGED MANUAL; also Price Lists, to

B. KEITH & CO.,

WILLIAM STREET, NEW YORK, U.S.A.

W. S. YATES,

Chemists' Shop Fitter, Shop Front Builder, and
Glass Show Case Maker.

DENTIST CASES.

Plans and Estimates supplied for Work in any part of the Kingdom.

9 CAMDEN STREET, LIVERPOOL.

GENUINE THIBET MUSK.**"PHENIX"
BRAND,****SEASON
1883.**

Grained, and
Guaranteed Pure by
SYMES & Co.,
The Viceroy's Chemists,
SIMLA (HIMALAYAS).

Symes & Co.

MUSK of the above Brand is received direct from SIMLA (in GRAIN only).
It is now put up in bottles of only one size, each containing 1 oz. avoirdupois.
PRICE, 2s/; two bottles, 4s/; four bottles, 5s/; For 4 oz. (16 bottles) and upward
50/ per ounce.

LYNCH & CO., 192 Aldersgate St., LONDON

FOR PREVENTION, RELIEF, AND CURE OF

**GOUT, RHEUMATISM, COLDS, NEURALGIA,
TOOTHACHE, SCIATICA, AND ALL NERVOUS DISORDERS.**

Consisting of Flannels, all descriptions of Underclothing, Chest Preservers, Knee Caps, Knitting Yarn, Wadding, Pine Needle Oil for Embrocation, Bath Extract, Soap, &c., &c.

CAUTION.—None Genuine without
Trade Mark and Signature.

Lairitz

Sold by all Chemists and Druggists; also of all
Drapers, Hosts and Warehouses.

Sole Exporter **ERNEST GUTMANN, KARLSRUHE, (BADEN).**

DUNCAN, FLOCKHART & CO.,

WHOLESALE AND EXPORT DRUGGISTS, EDINBURGH.

CHLOROFORM

Prepared from Pure and Methylated Spirit.

Put up in all sizes of bottles. A strap with Name and Trade Mark of the Firm is placed over the stopper of each bottle. For Export, in bottles corked and luted (stoppers attached), and in hermetically sealed flasks when required.

H.B.—We guarantee our Chloroform prepared from METHYLATED SPIRIT to be PURE CHLOROFORM, answering all the tests of the British Pharmacopæia.

CHLORIC ETHER.

SP. AMMON. AROMAT.

| SP. ETHER. NITROS.

| SYR. FERRI PHOS. CO. (PARRISH).

Fluid Extracts, Concentrated Infusions, and all Pharmacopœial Preparations

MANUFACTURERS OF THE CELEBRATED

BLUE BLACK WRITING INK & COPYING INK.

SHIPPERS SUPPLIED ON LIBERAL TERMS.

White Gutta Percha for Stopping Teeth, in 6d. and 1s. Boxes.



(Expositions : Internationales : Grand : Prize : Medals.)



"CRYSTAL WHITE" DOUBLE REFINED ESSENTIAL OIL OF TRUE PEPPERMINT.
ORIGINAL AND ONLY MANUFACTURER OF
PIPMENTHOL CRYSTALS.

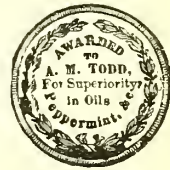
THE "CRYSTAL WHITE" ESSENTIAL OIL and SOLID CRYSTALS OF PEPPERMINT are produced from SELECT CULTIVATED PLANTS OF GENUINE MENTHA PIPERITA, under improved and special processes (discovered by the manufacturer), by which they combine EXCEEDING STRENGTH with the most PERFECT FRAGRANCE and ABSOLUTE PURITY. In recognition of their quality they have received the highest commendation from the most EMINENT SCIENTISTS, the LEADING CONSUMERS, and at the GREAT EXHIBITIONS. Prepaid samples and quotations for free delivery in any city in America, Europe, or the Colonies, will be sent on application.



GENERAL CABLE ADDRESS, "CRYSTAL, NOTTAWA, MICHIGAN."

Trade Mark, **CRYSTAL WHITE** Registered

Nottawa, St. Joseph County, Michigan, U. S. A.



B. G. LENNON & CO.

WHOLESALE DRUGGISTS AND DRUGGISTS' SUNDRIESMEN,

PORT ELIZABETH, CAPE TOWN, AND EAST LONDON, SOUTH AFRICA;

And 11 Edmund Place, Aldersgate Street, LONDON, E.C.

AGENCIES UNDERTAKEN.



HORSFORD'S ACID PHOSPHATE,

(LIQUID).

Prepared according to the directions of Prof. E. N. HORSFORD, of Cambridge, Mass., U.S.A.

FORMULA:—Its analysis shows that each fluid drachm contains 5 1-2 grains free Phosphoric Acid (P_2O_5), and nearly 4 grains Phosphate of Lime, Magnesia, Iron, and Potash.

Horsford's Acid Phosphate has been in use by the medical fraternity of the United States and elsewhere for several years, with the most satisfactory results, in

Dyspepsia, Indigestion, Mental and Physical Exhaustion, Insomnia, Nervousness, Diminished Vitality, &c.

It is a colourless liquid, acid to the taste, and contains no pyro-phosphate or meta-phosphate of any base whatever.

Among the numerous forms of phosphorus in combination, Horsford's Acid Phosphate seems best adapted for use as a medicinal remedy.

Especially serviceable as a menstruum for the administration of such alkaloids as strychnia, morphia, quinia, and other organic bases which are usually exhibited in acid combination.

It makes a refreshing and nutritious drink in fevers, and with water and sugar a delicious beverage.

Cable Address—"RUMFORD, PROVIDENCE." RUMFORD CHEMICAL WORKS, Providence, R.I., U.S.A.

CAN BE OBTAINED FROM

CORBYN, STACEY & CO.	and Branches,	7 Poultry, E.C.	86 New Bond Street, W.	300 High Holborn,
JOHN BELL & CO.	...	225 (late 338) Oxford Street, 2, 4, & 6	...	153 Leadenhall Street, E.C.
SAVORY & MOORE	...	...	...	Hill's Place, Oxford Circus, W.
ALLEN & HANBURY	...	...	...	143 New Bond Street,
FRANCIS NEWBURY & SONS	...	...	...	Plough Court, Lombard Street,
BARCLAY & SONS	...	...	...	1 King Edward Street,
MCDONAGALL BROTHERS	...	...	...	95 Farringdon Street,
JOHN THOMPSON	...	...	...	10 Mark Lane, E.C.
HENRY HODDER	...	...	...	58 Hanover Street, Liverpool.
RAIMES & CO.	...	...	...	Bristol.
THOS. McMULLAN & CO.	...	...	...	Edinburgh, Scotland.
				Belfast, Ireland.

And by Chemists in London generally, and throughout Great Britain.

PHYSICIANS who have not used Horsford's Acid Phosphate, and who wish to test it, will be furnished a sample on application to Corbyn, Stacey & Co., Francis Newbery & Sons, Barclay & Sons, London, or John Thompson, Liverpool; and sample will be furnished free of charge, except the expense of packing and postage (seven pence), which amount should accompany the application.

MENTHOL CONES.

(CHRISTY'S BRAND.)

These are the only Cones made from specially-selected crystals that have been found to produce the best therapeutical results.

The *British and Colonial Druggist* for December, 1885, says:—

"Dissatisfaction has been expressed of the inefficiency of many of the white menthol cones commonly sold, now said frequently to fail in relieving neuralgia, &c., whereas this was but seldom the case some little time back. . . . Of late the houses most interested in the article would seem to have been vying with each other in the endeavour to obtain a white, hard, dry, and comparatively infusible body, as free as possible from all suspicion of 'oiliness' to the touch. We have experimented with several varieties of menthol, and, from the evidence collected, are inclined to believe that the efforts in question represent just so much energy developed in the wrong direction."

Can be purchased loose or in boxes at a lower price than from any other maker.

THOS. CHRISTY & CO., 155 Fenchurch St., LONDON.

J. ROEBINS & CO.

METHYLENE.

Discovered to be a general Anæsthetic by Dr. RICHARDSON in 1857.

1-lb. Bottles, 16s.; 3-oz., 8s. 6d.; 4-oz., 4s. 6d.; 1-oz., 3s. 6d.

COMPOUND ANÆSTHETIC ETHER.

For producing Local Anæsthesia.

In 4-oz., 10-oz., and 20-oz. Stopped Bottles, 2s., 4s., and 7s.

OZONIC ETHER.

6-oz. and 16-oz. Stopped Bottles, 3s. 6d. and 12s.

PEROXIDE OF HYDROGEN.

First introduced as a Medicine by Dr. RICHARDSON.

ETHYLATE OF SODIUM

(Dr. RICHARDSON'S Formula), for removing Nævi, &c. In 1-oz. and 1-oz. Bottles, with elongated Stoppers for applying the Cautic, 2s. 6d. and 4s.

STYPTIC COLLOID.

For promoting the Healing of Wounds by the first intention. In 2-oz. and 4-oz. Bottles, with brush, 2s. 6d. and 4s. 6d.; 16-oz., 12s.

CHARCOAL CAPSULES.

Containing pure Vegetable Ivory Charcoal. In Boxes, 2s. 6d. each.

OXFORD ST. 147

HEALTH, STRENGTH, AND ENERGY.

DR. LALOR'S PHOSPHODYNE.

THE ONLY SAFE RELIABLE PHOSPHORIC REMEDY ever discovered for the Permanent Cure of Brain Wreckage, Paralysis, Sleeplessness, Harassing Dreams, Premature Decay of Vital Power, and all Functional and Diseased Conditions of the System dependent upon the Deficiency of the Vital Forces. It

Cures Dyspepsia, Nerve and Heart Disease. Cures Kidney and Liver Complaints. Cures all Blood Disorders. Cures Consumption and General Debility. Checks all Wasting of the Vital Forces, from whatever cause arising.

THE EFFECT of this Remedy in Nervous Debility and its Kindred Evils is Immediate and Permanent, all the Miserable Feelings and Distressing Symptoms disappearing with a rapidity that is REALLY MARVELLOUS.

DR. LALOR'S PHOSPHODYNE

Actually creates new Nervous Fluid and Brain Matter, by supplying the Blood with its Electric Life Element—PHOSPHORUS, the very core and centre of the Brain itself—Restoring the fullest and most Vigorous conditions of Robust Health of Body and Mind, so that all the Duties of Life may be pursued with Confidence and Pleasure, and whilst pleasant to the taste never fails to Purify and Enrich the Blood, and thoroughly invigorate the Brain, Nerves, and Muscles. Its Energising effects are shown from the First Day of its administration by a Remarkable increase of Nerve and Intellectual Power, with a Feeling of Courage, Strength, and Comfort, to which the Patient has long been unaccustomed. Digestion is invigorated. The Appetite increases wonderfully. The Bowels become regular. Sleep becomes Calm and Refreshing. The Face becomes fairer, the Lips red, the Eyes brighter, the Skin Clear and Healthy, and the Hair acquires Strength, showing the importance of its action on the Organs of Nutrition.

DR. LALOR'S PHOSPHODYNE

Is the only Medicine of the kind or name awarded a Certificate of Merit at the Calcutta Exhibition 1884, where all countries were Exhibitors, and the only Trade Mark—"PHOSPHODYNE"—Registered and Protected under the Trade Marks Act.

TWENTY-FIVE YEARS' CRUCIAL TEST, and Thousands of unimpeachable Testimonials from all parts of the World, and from the highest Medical Authorities, prove conclusively the Verdict Universal that in the World of Scientific research no other Phosphoric Preparation has received such exalted praise and distinguished recognition.

Sold in bottles at 4s. 6d. and 12s. by all Chemists throughout the World.

MANUFACTURED ONLY AT

DR. LALOR'S PHOSPHODYNE
LABORATORY,
HAMPSTEAD, LONDON, N.W.

IT WILL PAY YOU to send for Estimates to BOWERS BROTHERS. 89 BLACKFRIARS ROAD, LONDON, S.E.

10,000 Good Effective Handbills, 7½ in. by 5 in. 14-	Bowers' Manifold Order, Invoice, and Message Books 250 leaves, 5
1,000 000 do. do. 436	322 1/2 in. 8.
100,000 Pamphlets do. £25	Superfine Envelopes, name on flap per 1,000 4/ & 5/
Superfine Fly Leaf Note Paper per ream 8-	1,000 Posters, 25 in. by 40 in. £2 15

Send, Powder, Cash, Prescription and Recipe Envelopes in all qualities and in every style of printing. Counter and Show Bills, Trade Catalogues, Prices Current Business Circulars, and Ornamental Advertising Books at most moderate charges. Specimens and Estimates free.

DON'T ORDER BEFORE SEEING BOWERS' TOILETTE GUIDE AND CALENDAR—CHEAP, GOOD, USEFUL.

A libere di count to large consumers. Carriage paid on parcels of 40s. and upwards.

DISPENSING, ETC., BOTTLES.

WHITEHEAD & CO., 81 & 83 BLOOMSBURY, OXFORD ST., MANCHESTER.

Supply every description of above, and are second to no house in the kingdom, either in respect of quality or price.

Quotations for bottles of any size, shape, or colour, stating quantity required, on application.

OWNERS OF PROPRIETARY ARTICLES & SHIPPERS PLACED ON BEST TERMS.

MEDICATED LOZENGES.

T. BAGE BLYTON & CO.,
PHARMACEUTICAL CHEMISTS
(Successors to RICHARD TWEMLOW),

Manufacturers of BRITISH and THROAT HOSPITAL PHARMACOPŒIA and every other description of MEDICATED LOZENGES.

Sole Proprietors of TWEMLOW'S CHLORODYNE (extensively used in Hospital and Medical Practice during the past 15 years), Chlorodyne Lozenges, Bronchial Lozenges, &c.

TEREBENE LOZENGES, recommended for Winter Cough and Bronchitis.

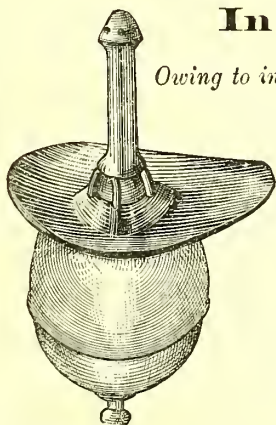
PRICE LISTS ON APPLICATION.

T. BAGE BLYTON & CO., 76 Gordon St., Lower Broughton, MANCHESTER.

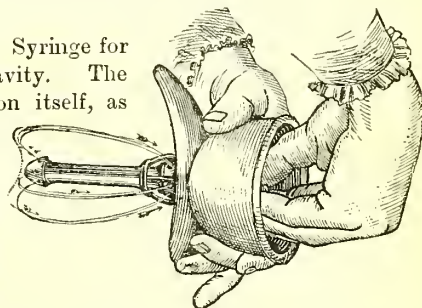
REDUCTION IN PRICE OF THE "PALLAS" SYRINGE. VAGINAL AND RECTAL.

In Black Walnut Case, Satin Lined.

Owing to increased demand we have been able to cheapen the cost of production of these Syringes and have pleasure in giving our customers the benefit thereof.



A MOST PERFECT and simply-constructed Syringe for medicating and irrigating the vaginal cavity. The novel bulb of this Syringe, when doubled upon itself, as shown in the cut, will cause no fluid to be left, as is so apt to happen with the ordinary bulbs, and when filled will contain just enough fluid for the expansion of the Vaginal folds. The hard rubber labial shield, with its plug, when firmly pressed against the labia, will both prevent spilling and soiling of linen, and the fluid



can therefore be kept in circulation and in contact with the parts by repeating the pumping motion of the bulb. It will also be noticed that the fluid escapes as a spray from the large holes at the point of the stem and returns through the holes at the root of same, which is provided with hard rubber screen-bars, preventing the folds from interfering with the rapid return of the fluid into the bulb. In filling the bulb, a couple of turns will unscrew it.

CRISTIAN JENSEN & CO., 2,207 FAIRMOUNT AVENUE, PHILADELPHIA.
WALKER, TROKE & CO., 82 City Road, London, Sole British Agents.

REDUCTION IN PRICE OF CARL L. JENSEN'S CRYSTAL PEPSIN

(SOLE ORIGINATOR OF PEPSIN IN SCALES AND "CRYSTAL" PEPSIN TABLETS),

Which has Achieved Unparalleled Fame in the following Treatments:

1. In most varieties of Dyspepsia.
2. In all forms of Debilities.
3. As a Solvent for Muco-Purulent matter.
4. Injected as a Solvent for Coagulated Blood in the Bladder.
5. As a Solvent for Diphtheritic patches and membranes, using a hot solution not above 130° Fahr. as a spray every fifteen minutes.
6. Mixed with Food for Rectal Alimentation.
7. Injected into cavities through an Aspirator Needle for the solution and removal of diseased accumulations.
8. For Predigestion of Milk; to each pint of warm milk use a few grains of the Pepsin previously dissolved in a little lemon-juice; decidedly superior to and more economical than Pancreatine.



Formula for Wine of Pepsin: Jensen's Pepsin, 192 grs.; Sherry Wine, fl. 3 viss.; Glycerine, pure, 5 iss.; Tartaric Acid, 5 grs. Sig.—Fl. 3 after meals. This is three grains of the Pepsin to each teaspoonful.

JENSEN'S BEEF PEPTONE IN TRANSPARENT GLASSY SCALES.

This Peptone is not a partially-digested product, but representing the Beef completely digested by the Pepsin mentioned above, containing all the elements of the beef except fat. One ounce equal to eight ounces tender beef. Retail, 2s. 6d. per ounce.

The above preparations are only manufactured and put up exclusively as specialities by

CARL L. JENSEN, 2,039 GREEN STREET, PHILADELPHIA, PA.

EXCLUSIVE BRITISH AGENTS—

WALKER, TROKE & CO., Wholesale Druggists, 82 City Road, LONDON.
Sold by NEWBERRY & SONS, 1 King Edward Street, Newgate Street, LONDON; GEHE & CO., DRESDEN; and CRISTIAN JENSEN, Gasveien No. 2, COPENHAGEN.

**IMPORTANT REDUCTION in the WHOLESALE PRICE of LAMPS,
FROM OCTOBER 1, 1884.**

SAMUEL CLARKE'S PATENT PYRAMID NURSERY LAMP FOOD WARMERS

MOSCOW EXHIBITION, 1872.



1st Award, First Grand Silver Medal to Samuel Clarke, London, for his Patent Pyramid Night Lamp Food Warmer.

2nd Award, First Grand Silver Medal to Samuel Clarke, London, for his Patent Pyramid Night Lights.



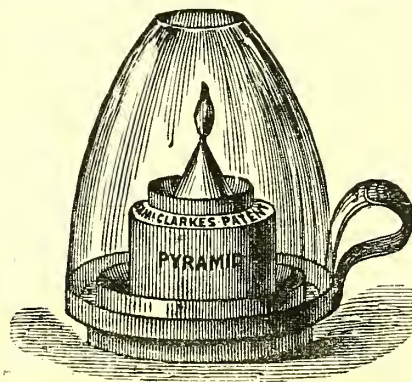
PRIZE MEDAL AWARDED, LONDON, 1873.

PRIZE MEDAL AWARDED, PARIS EXPOSITION, 1887.

SILVER MEDAL AWARDED AT THE HEALTH EXHIBITION, SOUTH KENSINGTON, 1884.



**Patent Pyramid
NIGHT LAMPS.
THE BURGLAR'S HORROR!!**



**GOLD MEDAL,
World's Exposition, New Orleans.**

- No. 1 Holds Half a Pint of Food, besides Water.
- No. 2 Holds Three-quarters of a Pint Food, besides Water.
- No. 3 Holds One Pint Food, besides Water.

Clarke's Hot-water Lamps.

" Pyramid Night Lamps, Lacquered or Bronzed.

" " " Lights.

EXTRAS.—Porcelain Panakins, Lids, Tin Panakins, Clear Glasses, Roughed ditto, Opaline ditto.

For Terms and Prices apply to the Patentee—

**PATENT "PYRAMID" NIGHT LIGHT WORKS,
CHILD'S HILL, LONDON, N.W.**

AMERICAN DEPOT: 25 & 27 EXCHANGE ALLEY, NEWARK, NEW JERSEY, U.S.A.

C. R. HARKER, STAGG & MOSS

WHOLESALE CHEMISTS & DRUGGISTS

DISTILLERS AND IMPORTERS OF ESSENTIAL OILS



MANUFACTURING PHARMACEUTICAL CHEMISTS

1886 COD LIVER OIL.

We are now delivering the New Oil. It is Pure, Brilliant, and Attractive, even below freezing point, easily digestible, and almost *free from taste and odour*.

BETTER OIL HAS NEVER BEEN OFFERED.

15 LAURENCE POUNTNEY LANE, LONDON, E.C.

Registered Address for Telegrams—STAGMOSS, LONDON.

GEOLINE
TRADE MARK

(PETROLATUM, PARAFFINUM MOLLE OF THE BRITISH PHARMACOPŒIA, 1885)

THE PUREST AND CHEAPEST ENGLISH-MADE

PETROLEUM JELLY,

AN INODOROUS AND PERFECTLY STABLE HYDRO-CARBON,

Manufactured by the

GEOLINE MANUFACTURING COMPANY,

PENARTH STREET, ORMSIDE STREET, OLD KENT ROAD, LONDON, S.E.

"THE LANCET" of Jan. 2, 1886, says:—"We have examined a sample of this product of Petroleum, and it appears to us to possess all the advantages that are claimed for it: under most favourable circumstances for decomposition we have found it to retain its purity."

Extract from the "BRITISH MEDICAL JOURNAL," Jan. 23, 1886.—"A perfectly efficacious and satisfactory 'medium' in all ointments. Keeps for an indefinite length of time pure and good. . . . The Dilute Citrine Ointment (unguentum hydrargyri nitratis dilutum), made with *Geoline*, keeps absolutely pure, is of a very firm consistency, pleasant in its use, having a nice jelly-like appearance."

T. & H. SMITH & CO.

CHEMICAL MANUFACTURERS

OFFER

MORPHIÆ HYDROCHLOR.

In powder and crystals.

MORPHIÆ ACETAS

MORPHIÆ TARTRAS

Introduced by them and specially prepared
for hypodermic treatment.

CODEIA

APOMORPHIÆ MUR.

PODOPHYLLIN

JALAPINE

SALICINE

CHLOROFORM PURE

CHLOROFORM METH.

Their brand has been for many years known to
the Wholesale Trade as absolutely pure.

ALOID

RESINA SCAMMONII, B.P.

GINGERINE

CAPSICINE

CAMPHOR MONOBROM.

ALKALOIDS, &c.

EDINBURGH Address—21 Duke Street.

LONDON Address—12 Worship Street, E.C

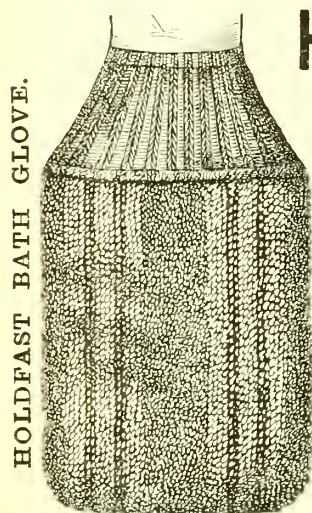
NEW YORK Office—20 Cedar Street: Fras. Jas. MacNaughton, Agent.

[1]

LINDSEY & SON'S

LONDON MADE TRUSSES,

Wholesale and for Exportation. Illustrated Price List post free.

32 LUDGATE HILL, and 40 GRACECHURCH STREET, E.C.
ESTABLISHED 55 YEARS.

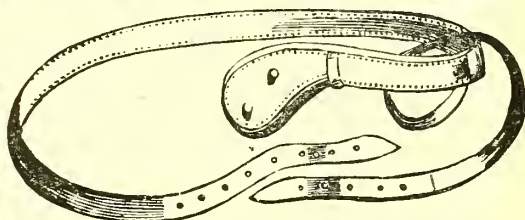
HOLDFAST BATH GLOVE.

REGISTERED 21,184.

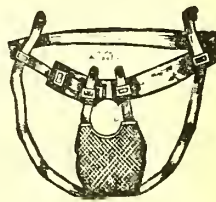
HAYWOOD'S SURGICAL APPLIANCES.



"Acme" Brace.

Elastic.
Stockings.

Trusses.

Greatest attention paid to Special
Orders, which are invariably
forwarded per return of post.

Suspensory Bandages.

List of Prices and Directions for Measurement forwarded
on application.

J. H. HAYWOOD. Castle Gate, NOTTINGHAM.

"GRAND DUCHESS"

FEEDING BOTTLES

With Bent Necks and Glass Screw Stoppers, fitted with Best Black Indiarubber Fittings.

6d. ... 3/6 per dozen ... 36/- per gross.

IN 1-DOZEN WOOD BOXES.

1/- ... 7/- per dozen ... 72/- per gross.

1/6 ... 9/- " " ... 96/- " "

IN SEPARATE CARD BOXES, HANDSOMELY LABELLED.

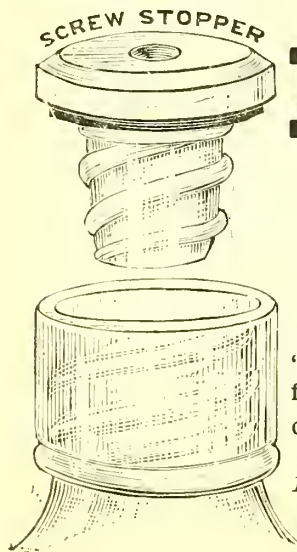
"GRAND DUCHESS" Feeding Bottles, Pale Green Glass Bottles, with Bent Necks,
fitted with White Indiarubber Fittings and Boxwood Top Cork, 24/- gross,
or with Black Indiarubber Fittings ... 28/- "

If with White Glass Bottles, 3/- per gross extra.

Delivered to any Railway Station in London, or sample order to any London House for enclosure.

MANUFACTURED BY

J. S. SIMCOCK, 311 Goswell Road, LONDON, E.C.



PRIZE MEDALS, INTERNATIONAL EXHIBITIONS.



LONDON, 1862.



PARIS, 1875.



PHILADELPHIA, 1876.



PARIS, 1878.



SYDNEY, 1879.



MELBOURNE 1880.

KILNER BROTHERS,

MANUFACTURERS OF



MINERAL WATER

Chem-
should
hand a
"OUR
FEEDING

One of the best selling
Various Styles
Green and White Glass, with

**D
I
S
P
E**

ists
keep on
stock of
BABIES"
BOTTLES.

articles in the Market.
and Prices.
White, Brown, and Black Fittings.

BOTTLES.

F E E D I N G

We supply GLASS BOTTLES for
attention to our extensive
fumery, and similar de-
White Flint in all

A large stock of
WOOD BOXES

Illustrated Cata-
Lists for-
appli-

**N
S
I
N
G**

all purposes, and invite special
variety for Dispensing, Per-
partments. Green and
shapes and sizes.

ESTES' TURNED
to choose from.

logues and Price
warded upon
cation.

BOTTLES.



KILNER BROTHERS,

No. 3 GT. NORTHERN GOODS STATION, KING'S CROSS, LONDON.

Obtained Highest Award, Calcutta Exhibition, 1884.

Our Award at Philadelphia International Exhibition was for "Good quality and suitability to purposes."

BREFFIT'S

AIRE & CALDER
BOTTLE CO., LD.,
CHEMISTS AND DRUGGISTS'
BOTTLES AND GLASSWARE.

AERATED WATER BOTTLES.

SOLE MAKERS
PATENT GROUND GLASS
Patents, Fitted Ebonite,
BREFFIT'S
BALL-STOPPERED BOTTLES
Glass, or Wood Stoppers.
ORDINARY BOTTLES FOR CORKS.

COLONIAL AND FOREIGN IMPORTERS

Will find we have very large variety of Moulds, to which we are constantly adding the latest novel and attractive shapes, suitable for various trades.

LARGE BUYERS LIBERALLY TREATED WITH.

WE ARE SOLE MAKERS OF THE REGISTERED SERIES
"INTERNATIONAL"

SCREW GLASS STOPPER FEEDING BOTTLES

SPECIALLY ADAPTED FOR COLONIAL AND FOREIGN MARKETS.

PERFUMERY FACTORS.

Over 9,000 various patterns—many new designs just added—great variety of Glass Stoppers, Glass and Metal Sprinklers, Caps, &c.

OUR NEW METAL CAPS,
FOR CAPPING STORE, SHOW, AND OTHER BOTTLES.

At present, sizes are from 1 to 4 inches diameter;

IN BRIGHT COLOURS, IN GREAT VARIETY.

SAMPLES, PRICES, ETC., UPON APPLICATION.

OFFICES AND EXTENSIVE SHOW ROOMS—

83 UPPER THAMES STREET,
LONDON.

POWELL & BARSTOW,

5 Albion Place, Blackfriars Bridge, London, S.E.,
Late W. HURLSTONE & CO., Blackfriars Road and Vine Street, S.E.,
MANUFACTURERS TO THE WHOLESALE TRADE OF
ELASTIC GUM SURGICAL INSTRUMENTS.

WORKS, LAMBETH.

ESTABLISHED 1830.

WORKS—
OLDBURY, near
BIRMINGHAM.**GIBBS, CUXSON & CO., WEDNESBURY,**

Telegraphic Address—

"Dressings Wednesbury."

MANUFACTURERS OF

SURGICAL DRESSINGS of every description,

AS SUPPLIED TO THE LEADING LONDON AND PROVINCIAL HOSPITALS.

GAUZE—Carbolised, Eucalyptised, Iodoform, Sanitas, Thymol, Tarred, Sublimate, Sero Sublimate, &c.**COTTON**—Aluminated, Borated, Benzoated, Camphorated, Carbolised, Eucalyptised, Ferrated, Iodised, Pierated, Iodoform, Resorcinated, Salicylated, "Sublimate," Tarred, Tannated, Thymolated, &c.**LINT**—Boracic, Carbolic, Iodoform, Salicylated, Thymolated, &c.**TOW**—Carbolic, Salicylic, Tarred, Styptic.**PROTECTIVE**—Silk, Green, Yellow, Paper, Gutta-percha, Tissue, Pink and Drab Jaconette.**LIGATURES**—Catgut (Carbolised, Chronic, &c), Silk (Carbolised and Plain).**PADS**—4 × 4, 6 × 6, 6 × 9, 18 × 10, &c, Absorbent Padding (Plain, Carbolised, and Aromatised).**PLASTERS**—Belladonna, Strapping, Mustard, Rubber, Soap, &c, on glazed and unglazed Calico, Linen, Holland, Swan's-down, Leather, &c.**BANDAGES**—Carbolic Gauze, Open Wove, Muslin, Calico, Plaster of Paris, &c.**SUPPOSITORIES, PESSARIES, & BOUGIES**, &c, see List.**G. C. & Co. pack Menthol Cones for Merchants, Shippers, and the Wholesale Trade.**

Large Consumers and Buyers are requested to write for Special Quotations. Price Lists on application.

H. M. COLWELL'S BEST LONDON MADE TRUSSES

MANUFACTURER.

WHOLESALE and for EXPORTATION, of TRUSSES, SUSPENDERS, ELASTIC STOCKINGS, and SURGICAL BANDAGES OF ALL KINDS.

THE BEST GOODS AT VERY LOWEST TRADE PRICES.

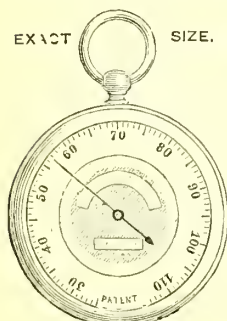
The Largest Shipper in the Trade. Illustrated Price List post free to any Address.

ESTABLISHED 50 YEARS.

116 NEWINGTON CAUSEWAY, LONDON, S.E.

THREE SILVER MEDALS IN 1885.

THE ONLY FIRST CLASS AWARD FOR THERMOMETERS BRIT. MED. CONGRESS.



IMMISCH'S PATENT METALLIC THERMOMETER.

"This instrument is about the size and shape of a lady's small watch, and the temperature is indicated very plainly by a hand revolving on a dial. Tested in the axilla, in the usual way, the result coincided with that obtained by means of a certified thermometer of the shape ordinarily in use, and its sensitiveness appeared at the least fully equal to that of the bulb instrument. The shape and solidity of this instrument both offer distinct advantages over the thermometers in general use, the expense of which, in consequence of their fragility, constitutes a notable item in the instrument bills of hospitals and of medical men in active practice."

New Inventions, *British Medical Journal*, Dec. 12, 1885."It is equally sensitive and accurate as glass clinical thermometers."—*Lancet*, Dec. 5, 1885."Reliable, sensitive, and durable."—*Provincial Med. Journal*, Oct. 1, 1885.

To be obtained of all Instrument Makers and Druggists' Sundriesmen.

LINT.

GAMGEE TISSUE.

(PATENT ABSORBENT GAUZE AND COTTON WOOL.)

ABSORBENT COTTON WOOL.

ROLL BANDAGES.

ROBINSON & SONS,

COTTON SPINNERS AND MANUFACTURERS OF

SURGEONS' LINTS, COTTON WOOLS, AND BANDAGES,

WHEAT BRIDGE MILLS, NEAR CHESTERFIELD.

Depot—55 Fann Street, Aldersgate Street, London.



TRADE MARK.

THE SURGEONS' LINT.

V.B. QUALITY.

The superior quality of NEWSOME'S ABSORBENT SURGEONS' LINT is universally admitted.

The V.B. Quality is quite pure and of great superficial area and exquisite softness.

The C. Quality is equally absorbent and pure, but stronger in fabric.

Newsome's Bleached Rolled Bandages, 3 in., 2½ in., 2 in. Also Surgical Absorbent Open Bandages.

Specially Bleached Grey Carded Cotton Wools, Absorbent and Bleached and Grey Waddings; also Sheet Waddings, Tow, &c.

THE TRADE SUPPLIED THROUGH THE LONDON AND PROVINCIAL WHOLESALE HOUSES, OR FROM

C. NEWSOME, Spinner and Manufacturer, Jersey Street Mills, Ancoats, **MANCHESTER.**
London Agents: B. PRATT & CO., Wood Street, E.C.

ESTAB.
1847.

EDWARD TAYLOR,

ESTAB.
1847.

MANUFACTURER OF ALL KINDS OF

Medical, Surgical, Marginal, and Belladonna POROUS PLASTERS,

For Home Trade and Export to all Climates,

ISLINGTON SQUARE, SALFORD, MANCHESTER.

SAMPLES AND QUOTATIONS ON APPLICATION.

THE LIVERPOOL PATENT LINT CO.

MARK STREET MILLS,

NETHERFIELD ROAD, NORTH,



LIVERPOOL,

MANUFACTURERS OF

PATENT FLAX AND COTTON LINTS OF SUPERIOR QUALITY,

ABSORBENT AND CARDED COTTON WOOL,

ABSORBENT, OPEN WHITE, & GREY, BANDAGES, SURGEON'S AND STYPTIC TOW.

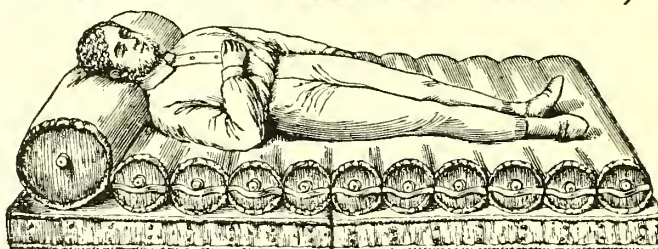
UNIVERSAL TUBULAR WATER & AIR BED

Prize Medals, Sanitary Congress, 1878; Industrial Exhibition, York, 1879; Certificate of Honour, Sanitary Congress, 1879; Brighton, 1881; International, 1881; Kensington, 1882.

POCOCK BROTHERS,

PATENTEES AND SOLE MANUFACTURERS
235 SOUTHWARK BRIDGE ROAD, LONDON.

Consists of a series of separate and distinct cylinders, any diameter and suitable length, made of Waterproof material either for Water or Air, fitting into a case which keeps them side by side, but slightly apart.



ITS ADVANTAGES
OVER
ORDINARY WATER
OR
AIR BEDS ARE AS
FOLLOWS:—

1. In cost it is less expensive.
2. It is warm and light, and well adapted for a camp or field-bed, being waterproof.
3. It is quickly filled and easily adjusted.
4. It admits of ventilation in the space between the tubes.
5. It can be regulated so as to relieve pressure from any part required.
6. By the addition of tubes it will raise one part of the body higher than the rest.
7. By the temporary removal of one or two tubes it affords room for the introduction of a bed-pan.

8. It can be inclined to any angle (even when filled with water) to suit the condition of the patient.
9. It is free from noise and surging, so disagreeable to the invalid on changing his position on a water-bed.
10. In case of injury to a tube it can be withdrawn, and a fresh one substituted at a trifling cost, and without loss of time; whereas the ordinary water-bed if injured in any part (from being in one compartment) is rendered useless.
11. In the treatment of insane or paralysed invalids who have no control over their evacuations, they cannot lie in a pool of wet, the fluid passing away between the tubes.

IMPORTANT TO COLONIAL AND SPANISH BUYERS.

A. HUTCHINSON & CO.,

MANUFACTURERS OF INDIARUBBER GOODS.

SPECIALITIES—"The Odourless Bed Sheetting," Rose Pink, Black, Drab, or Cream—Sponge Bags, "Pointillé," Fancy Double Proof, Star Check—Zephyr Air Pillows and Cushions, warranted in all climates, very light, soft, bright colours or drab, and inexpensive—Improved Ice Bags—Bandage "Heftband"—The Lady Help Apron in all colours.

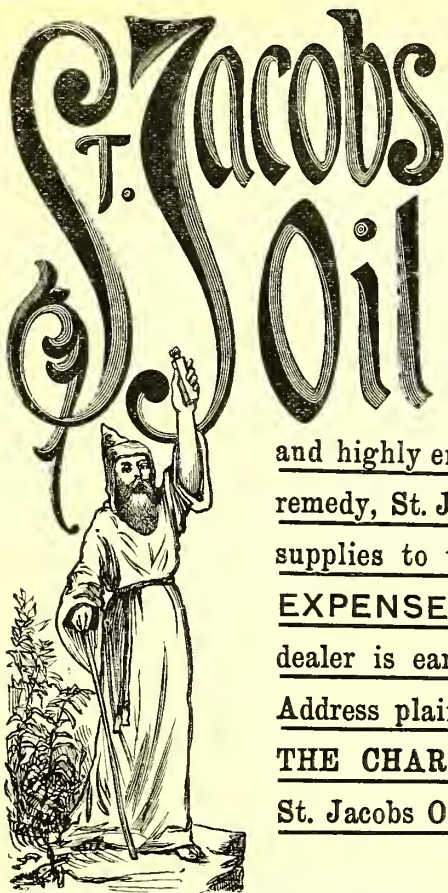
TO BE OBTAINED THROUGH ANY WHOLESALE HOUSE.

Manufactories—PARIS, LANGLEE (Montargis), FRANCE; MANNHEIM, GERMANY.
WAREHOUSE—3 & 4 GREAT WINCHESTER STREET, LONDON.
Telegraphic Address—"HUTCHINSON LONDON."

ESCHMANN BROS. & WALSH,

INVENTORS AND MANUFACTURERS OF THE
Soft Silk Flexible Catheter,
WITH WOVEN EYES.

TO BE HAD OF ALL SURGICAL INSTRUMENT MAKERS AND WHOLESALE HOUSES.



1886. IMPORTANT TO CHEMISTS. 1886.

THE GREAT CURE

FOR RHEUMATISM!

"IT CONQUERS PAIN!"

We are now issuing a very large edition of original and highly entertaining advertising matter (relating to our popular remedy, St. Jacobs Oil), of which we are prepared to furnish liberal supplies to the Retail Trade of Great Britain, FREE OF ALL EXPENSE, AND BEARING DEALERS' CARD. Every dealer is earnestly requested to send us, at once, his Name and Address plainly written, that we may supply him at an early day. THE CHARLES A. VOGELER COMPANY, Sole Proprietors of St. Jacobs Oil, Great Britain Branch, 45 Farringdon Road, London, England.

BROWNEN'S IMPROVED OPHTHALMIC & HYPODERMIC LAMELS OR DISCS.

THESE Lamels are prepared by G. BROWNEN, F.C.S. (who has had great experience in their manufacture), to meet the requirements of modern surgery. Aided by new and special apparatus, he is now able to produce a perfectly pure and stable Gelatine. This Gelatine is purified from collagenous homologues of soluble Gelatine, and incorporated with the purest brands of Cocaine or other medicaments in a pure atmosphere, carefully freed from dust and germs of fungi or disease. The resultant Lamels are consequently pure, permanent, and definite. They are not artificially coloured with Anilines or other dyes. Three of these Lamels are now official in the B.P., 1885, viz.:—Atropine, Physostigmine, and Cocaine. These are now supplied (either separately or in convenient nickel-plated boxes, for the waistcoat pocket, containing the three preparations).

SOLE AGENT, WHOLESALE AND RETAIL,
W. MARTINDALE, 10 New Cavendish Street, LONDON, W.

NEWTON, ROBINSON & CO.,
FARADAY CHEMICAL WORKS, BIRMINGHAM.

SPECIALITIES—

Telegrams—"FARADAY BIRMINGHAM."

TEREBENE, C₁₀ H₁₆

An optically inactive isomer of Turpentine, free from undecomposed Turpentine, Colophene, &c.

LIQ. FERRI PERCHLOR. FORT. P.B

ACID HYDROBROMIC CONC., and B.P. LIQ. AMMON. FORT. '880.

PURE ACIDS—Sulphuric, Hydrochloric, Nitric, Phosphoric, &c.

HYDROCYANIC ACID (Scheele's and B.P.).

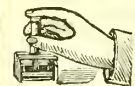
Special attention to the Supply of Chemicals required in the Arts and Manufactures.

Special Terms to Shippers and the Wholesale Trade.

HORN & SON PATENT AGENTS.

Manufacturers' Designs and Trade Marks Registered.
SOMERSET CHAMBERS, 151 STRAND, LONDON.

Guide to New Patent Law and Registration gratis.



Nickel Silver Self-inking Press, with name complete,
PRICE 2/.

Usual Discount.

INDIARUBBER STAMPS

(Warranted best quality).

Many Chemists are making large profits with our goods. Send business card for specimen sheets and trade terms to

E. M. RICHFORD,
THE CITY RUBBER STAMP COMPANY,
SNOW HILL, LONDON.

Branches—Liverpool, Manchester, Glasgow, Paris, Brussels.

RUBBER STAMPS

OF EVERY DESCRIPTION. PATTERNS POST FREE.

Self-inkers, Daters, Monograms, Rubber-faced Type, Patent Inking Pads, Rubber Printing Press, &c.

Apparatus and all supplies for Stamp Making. Wholesale and Export.
THE LONDON RUBBER PRINTING CO., MANUFACTURERS & PATENTEES,
33 CHEAPSIDE, LONDON.



INDIARUBBER STAMPS.

Metal-bodied Rubber Types and Dating Stamps.

Chemists taking up the sale of my Specialities will be presented gratis with one Transparent WINDOW TICKET.
Send for Lists.

M. LINDNER, Manufacturer,
170 FLEET STREET, LONDON, E.C.

COLOMBO, CEYLON.

NEIL S. CAMPBELL & CO. CHEMISTS,

Possess exceptional facilities for the introduction of Novelties and General Merchandise. Agencies receive energetic attention.

SHARLAND & COMPANY,

WHOLESALE DRUGGISTS,
AUCKLAND, NEW ZEALAND.

Samples may be sent for enclosure to Messrs. Horner & Sons, Mitre Square, Aldgate, London, E.

London References—Messrs. HORNER & SONS.

SHIRREFFS & CO.,

Chemists, Druggists, and General Merchants,
ALLAHABAD, N. W. P., INDIA,

Possess exceptional facilities for the introduction of New Specialities, Patent Medicines, Druggists' Sundries, Perfumeries, &c.

AGENCIES UNDERTAKEN.

The Firm's name on goods is guarantee for their Absolute Purity, Highest Perfection, Uniform Excellence. Prize Medals at Six International Exhibitions.

First and only Quality,
The Best.

ROSENTHAL'S

For Quality and Price
Unrivalled.

RICE STARCH: CRYSTALS, GRANULATED & FLOUR

For domestic and manufacturing uses, as Perfumers', Confectioners', Lozenge Manufacturers', Shirt & Collar Dressers', Laundries', Bleachers', Paper Makers', and other special uses. *Rosenthal's "SIN RIVAL" Corn Flour, prepared from Rice for food purposes.* **F. ROSENTHAL & Co.,** Starch and Corn Flour Manufacturers, 12 Mark Lane, and Mincing Lane, London. Agents Wanted.

PURE PRECIPITATED CHALK.

Cheapest Sellers in the Market.

Chemicals, Drugs, and Oils at lowest market rates.

APPLY TO

AUG. LEVERMORE & CO.,
8 LIME STREET, LONDON, E.C.

DR. G. H. JONES, F.R.S.L., &c,

SURGEON-DENTIST,

57 GREAT RUSSELL STREET, LONDON

(Facing British Museum entrance).

Will forward his New 64-page Pamphlet, entitled "PAINLESS AND PERFECT DENTISTRY," which contains a List of the Diplomas, Gold and Silver Medals, and other Awards obtained at the Great International Exhibitions, to any part of the world, gratis and post free. Agents Wanted.

PETROLEUM JELLY,

EQUAL TO AND CHEAPER THAN VASELINE.

SANITARY FLUID AND SHEEP DIP,
THE CHEAPEST AND BEST DISINFECTANT.

GREASE, PITCH, ASPHALTE, AND ALL PRODUCTS OF TAR AND ROSIN.
Samples and Prices on application.

GRINDLEY & CO., POPLAR, LONDON, E.

BARNES'

IMPERMEABLE CARRAGEEN POULTICE.

Emollient and anti-septic; pliable, portable, adhesive; when wetted adapts itself to the contours of the part to which it may be applied, and will retain moist heat for days. Invaluable for travellers and others. Also

CARBOLISED IMPERMEABLE CARRAGEEN POULTICE,
containing 10 per cent. Carbolic Acid.

Suggested for use in Diseases of the Skin.

Prepared by J. B. BARNES, Pharmaceutical Chemist, 1 Trevor Terrace, Knightsbridge, London, S.W.

YARDLEY & CO.'S CHOICE TOILET SOAPS.

Prize Medals Awarded for Purity and Excellence of Quality.

Manufactory—Ridgmount Street, Store Street, Tottenham Court Road, LONDON.

Depot—32 Rue de l'Entrepot, PARIS.

S. SAINSBURY'S

MANUFACTORY—
176 & 177
STRAND, LONDON.

In Bottles, from 1/ to 6/; in Cases, from 3/ to 15/6.

TRADE TERMS ON APPLICATION.

Lavender Water.



ASSAY FURNACES, &c. THE MORGAN CRUCIBLE CO.,

Sole Manufacturers of
MORGAN'S and SALAMANDER CRUCIBLES.

BATTERSEA, LONDON, S.W.

All kinds of Crucibles in Plumbago, Clay, &c., Single and in Nests. Muffles, Portable Assay and Melting Furnaces, &c.

Read "Assay Notes" in C. AND D., April 15, 1883.

"SPÉCIALITÉ" LIME JUICE

(NO MUSTY FLAVOUR).

For Sample and Terms

FELTOE & SONS,
ALBEMARLE STREET, LONDON, W.

Can be obtained through the Wholesale Houses.

STILL THEY COME!

ANOTHER SILVER MEDAL.

Highest Award at New Orleans in 1885.

Gold Medal Over All Competitors at Vienna Pharmaceutical Exhibition in 1883.

Medical Jurors' Award for Originality, Reliability, and General Excellence of Manufactures. A Verdict Universally Sustained.

OFFICE OF SEABURY & JOHNSON,

1 and 2 Australian Avenue, London, E.C.

ONLY ONE QUALITY—THE BEST.

WE Manufacture but one quality, a policy to which we adhere with unswerving fidelity. We have no interest in cheap Pharmaceutical Preparations simply because they represent alterations and adulterations in formulæ and materia's.

Our operations are conducted wholly to serve the best interest of the Medical Practitioner, to support the intelligence of the Dispensing Pharmacist and Druggist, and not to serve commercial ends by producing a class of suspicious medicinal (?) agents that should be suppressed by every dealer who has an honest regard for the progress and professional *morale* of Medicine and Pharmacy. Our only aim and ambition has been, and always will be, to excel in making the very highest quality in the most acceptable and practical form, at exceedingly reasonable rates.

Our facilities for the economical and elegant production of our Specialties are unequalled by any firm in the world. The highest and most flattering indorsements, exceeding twenty-five highest awards over all competitors, European and American, have been voluntarily accorded us, for our many inventions and conveniences for the Surgeon, Medical Practitioner, and Pharmacist.

TRADE-MARK VIOLATIONS WILL BE PROSECUTED.

Competitors have also extended us silent and eloquent recognition, by not only adopting as far as possible our style of goods, labels, and general similar external appearance, but they also without permission reproduced our own literary matter, copied our lists, copied our business methods and policy, clearly admitting our supremacy, and for all these colourable imitations they never yet have had the politeness to thank us.

We never have failed to receive Highest Awards, Gold, Silver, and Bronze Medals, over all competitors at every Exhibition that we ever attended, and to contradict some of the insinuations of competitors **whose tongues do more service to their specialties than do their heads.** THIS CORPORATION OR FIRM HAS NEVER PAID FOR SUCH MERITED DISTINCTION IN ANY SHAPE OR FORM.

In conclusion, as this Corporation, its rights and properties are entirely owned by the President, he takes pleasure in assuring the trade that all officers are pledged to act strictly in accordance with these announcements and policy, and to so manage and direct their special trusts and our affairs as to always merit the respect and confidence of the Physician, the Pharmacist, and the Trade generally.

Very truly yours,


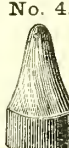


SEABURY & JOHNSON.

GEORGE J. SEABURY, President.

JOHN M. PETERS, Treasurer.

ROBERT J. SEABURY, Secretary.

MENTHOL CONES—A1 BRAND.


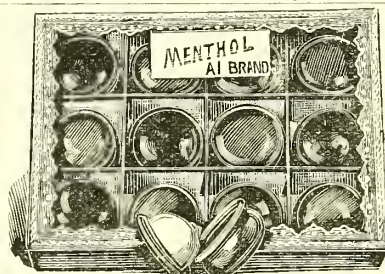
No. 1.  ORDER AS A1 BRAND. -/6 Glass, 3/8 per doz.	No. 2.  ORDER AS A1 BRAND. -/6 Willow Wood, 3/6 per doz.	No. 4.  ORDER AS A1 BRAND. 1/- Menthol on Wood Mount, in Screw- capped Glass Bottle, 6/9 per doz.	No. 5.  ORDER AS A1 BRAND. 1/- Bullet Shape Cone, in Screw- capped Bottle, 6/9 per doz.	No. 6.  ORDER AS A1 BRAND. 1/- Boxwood, Pedestal Shape, 5/3 per doz.	No. 7.  ORDER AS A1 BRAND. 1/- Boxwood, Barrel Shape, 6/3 per doz.	No. 8.  ORDER AS A1 BRAND. 1/- Boxwood, Acorn Shape, 6/3 per doz.
---	---	--	--	--	---	---

No. 12,
Polished Sycamore,
3/6 per doz.

**ALL SHAPES SENT OUT
IN SHOW BOXES.**

*Special Terms to Shippers
and Large Buyers.*

**GUARANTEED PURE JAPAN MENTHOL.
NO STAMP REQUIRED.**

Nos. 9 & 9a.
1/- & 1/6
Boxwood,
Skittle Shape,
6/3 and 8/-
per doz.

No. 17.—Quite New. Draughtsman Shape, Ebony
and Boxwood alternate. The most pocketable
shape in the market. 8/- per dozen.

**No. 13, Vegetable
Ivory, Acorn Shape,
6/9 per doz.**

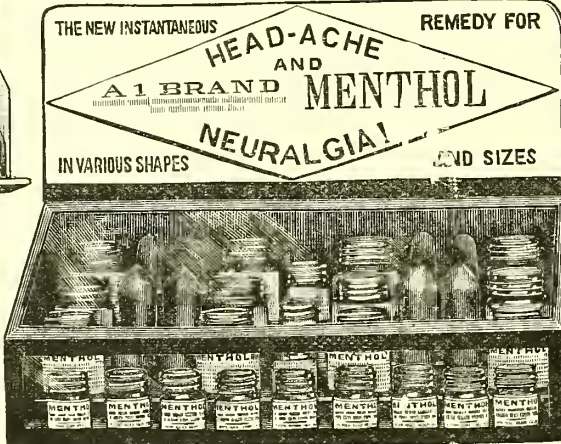
**ALL BOXWOOD PATTERNS
HAVE SCREW TOPS.**

*5 per cent. discount for
cash with order, if sent
direct.*



-/6 Cardboard, pocketable, pretty,
saleable, 3/4 per doz.

The winter season having
well commenced, Menthol
will be in great demand;
so have a show case, which
is bound to increase the
sale.



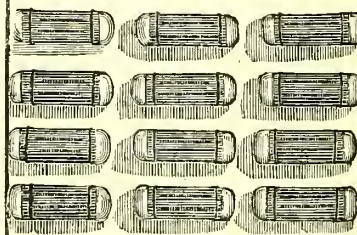
Write for detailed Price List, sent free by
post. In it you will find particulars of
Handsome Glass-fronted Show Case (as
diagram below) given away to purchasers of
3 dozen.

No. 10.

A1 Brand. MENTHOL A1 Brand.

6d. NEURALGIA & HEADACHE 6d.

PENCIL.



-/6, 12 on a card, 3/8 per doz.

The Show Case is 11 ins. long
by 5½ ins. deep, and the lid lifts,
so that the Goods can be sold
from it, making it both a useful
and attractive addition to a
Chemist's counter.

All shapes and sizes can be procured through any Wholesale House, or direct from

**J. G. SHIRLEY, PROPRIETOR A1 BRAND MENTHOL,
30 PATERNOSTER SQUARE, LONDON, E.C.**

Telegraphic Address—"MENTHOL LONDON."